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ERIE COUNTY MEDICAL CENTER CORPORATION

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REQUEST FOR PROPOSALS FOR  
ARCHITECTURAL / ENGINEERING SERVICES

FOR:

**EMERGENCY DEPARTMENT MODERNIZATION PROJECT**

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[NOVEMBER 10, 2014]

RFP # 21429

The deadline for submission of proposals is **Friday, December 5, 2014 at 11:00 a.m. EST.** Submit one (1) sealed paper copy and one (1) electronic copy (on flash drive or CD-ROM) of the proposal to:

Erie County Medical Center Corporation  
Attention: Sarina M. Rohloff  
462 Grider Street - Room G-140  
Buffalo, New York 14215

**LATE OR INCOMPLETE BIDS WILL NOT BE ACCEPTED**

Mark in left hand corner of envelope:

RFP #           **21429**

Due:             **Friday, December 5, 2014**

Submitted by: \_\_\_\_\_

In accordance with State Finance Law Sections 139-j and 139-k, the designated contact for this RFP is listed below. All questions regarding this RFP must be submitted in writing to the designated contact within the timeframes set forth in the RFP Schedule. Copies of questions and responses will be issued to all respondents as an Addendum to this RFP as set forth in the RFP Schedule.

Sarina M. Rohloff  
[Srohloff@ecmc.edu](mailto:Srohloff@ecmc.edu)

I. BACKGROUND

- A. Erie County Medical Center Corporation (“ECMCC”), located in Buffalo, New York, is a public benefit corporation, created by state law on July 22, 2003. ECMCC previously operated as a department of the County of Erie, New York.
- B. ECMCC has 550 inpatient acute, psychiatric, rehabilitation, and alcohol rehabilitation beds. ECMCC has more than 40 outpatient specialty care clinics with both on-site and off-site locations. In addition, ECMCC operates Terrace View, a skilled nursing facility with 390 beds.
- C. As a regional Trauma Center, ECMCC brings a special expertise and a high level of medical and surgical skill to every patient care department in the Hospital, from the Burn Treatment Center to the Spinal Cord Injury Unit to the 24/7 Angioplasty Program.
- D. As the medical emergency response system for the entire county, ECMCC has one of the largest emergency departments in Western New York, with 29 exam rooms, including four for trauma, and a “fast track” program available for less critical emergencies.
- E. ECMCC’s Regional Burn Treatment Center is the only unit of its kind in Western New York. With 24 hour burn care by a specially trained burn healthcare team, extensive rehabilitation programs, and comprehensive psychosocial support, the Burn Center is an integral part of ECMCC’s trauma services.
- F. ECMCC is affiliated with the State University of New York at Buffalo and is recognized as a major teaching hospital in Western New York.

II. RESERVATION OF RIGHTS:

- A. ECMCC reserves the right to qualify multiple respondents.
- B. ECMCC reserves the right to reject any and all proposals submitted in response to this Request for Proposals (“RFP”).
- C. ECMCC reserves the right to terminate this RFP process at any time.
- D. ECMCC reserves the right to waive any non-conformity with the requirements of this RFP.
- E. ECMCC reserves the right to seek clarification from a respondent at any time throughout the RFP process for the purpose of resolving ambiguities or questioning information presented in the proposal.
- F. ECMCC reserves the right to apportion the award among one or more respondents.

III. RFP SCHEDULE:

RFP Issued:	<b>Monday, November 10, 2014</b>
Deadline for Questions:	<b>Tuesday, November 18, 2014</b>
Notification of Intent to Submit Proposal Due:	<b>Wednesday, November 19, 2014</b>
Answers Issued By Addendum:	<b>Tuesday, November 25, 2014</b>
Proposals Due:	<b>Friday, December 5, 2014</b>
Contract Award:	<b>TBA</b>

#### IV. PROPOSAL REQUIREMENTS

In order to be considered, proposals submitted in response to this RFP shall include the following information, which shall be presented in the below established format:

- A. A narrative description of your firm's experience in providing architectural/engineering ["A/E"] services under an agency agreement.
- B. A narrative description of your firm's experience in providing architectural/engineering design services applicable to and/or similar to that of the below listed potential construction and/or renovation projects. Narratives on relevant project experience must include detail on:
  - a) project square footage, b) value of the construction and/or renovation work, c) the identification of any involved design sub-consultants and/or joint-venture design partners, particularly those that were/are certified Minority ["MBE"] or Woman Owned Business Enterprises ["WBE"], d) experience with project assigned Construction Management Agent, e) contact information for at least one Owner Representative & one Construction Manager Representative, and f) where applicable, a description of related project experience with a municipal health care project owner; related project experience with municipal union involvement; and/or related project experience working for academic medical centers.

##### Potential Construction and/or Renovation Projects

###### 1. Emergency Department Additions & Renovations

- C. Current resumes of all personnel that will be assigned to this project if your firm is selected to provide consulting services. In addition, explain what role will be played by each member of your proposed team on this project.
- D. An organizational chart of your firm.
- E. Disclose whether any shareholder, director, officer or employee is currently employed by ECMCC, or was an employee of ECMCC during the two (2) year period preceding the date of the proposal, and if any shareholder, director, officer or employee is a member of any governing board of ECMCC or its affiliates.
- F. Disclose any actual or potential conflicts of interest. In particular, provide a list of all work your firm is doing, or has done, for any health care provider having business locations anywhere in the eight western-most counties of New York State. In addition, provide an affirmative statement identifying any employee or agent, or former employee or agent, of your firm who is or has been employed by ECMCC.
- G. The following forms must be submitted with each proposal, as further specified below:
  1. MWBE Utilization Plan - Form MWBE 100 (Exhibit A-1)
    - Respondents are required to submit a fully executed MWBE Utilization Plan identifying the NYS certified MWBE's the respondent intends to engage for the Emergency Department Modernization Project, this based on the projected budget and anticipated scope of services. When the scope of services and budget are finalized, the successful respondent shall be required to re-submit its

utilization plan with updated values. Therefore the initially submitted plan shall reflect estimated MWBE involvement values.

2. Respondent Data Form (Exhibit B)
3. Non-Collusive Bidding Certification (Exhibit C).
4. Disclosure, Affirmation and Certification in accordance with State Finance Law §§ 139-j and 139-k (Exhibit D).
5. Proposal Form (Exhibit E). Further instructions for the proposal form are described in Section V below.

## V. SCOPE OF REQUESTED SERVICES

A. ECMCC is seeking qualified consultants to provide A/E services for the intended Emergency Department Modernization Project which shall involve both additions and alterations the existing Emergency Department. ECMCC expects to select and retain one prime consultant, should any be selected through this RFP process.

### B. A/E Service Fee Structuring:

A description of your proposed fee structure for the solicited services is required in the format described below. Exhibit E is included at the end of this RFP for the candidate's completion and inclusion in the pending proposal submission. Before establishing these fee structures there are a few key service scope factors that the Proposers will need to account for in their applicable fee percentages. These factors are as follows:

1. For the purposes of this RFP the definition of "**Contracted Value**" shall mean the sum of all project applicable construction, renovation, furniture, fixture, and equipment contract costs. This would specifically exclude project applicable Construction Management costs, including direct personnel, reimbursable expenses, and service fees. Costs associated with equipment purchases made directly by ECMCC shall also be **excluded**.
2. The initial A/E service contract fee shall be based on established budgets. A fee reconciliation process shall follow the award of project related construction, renovation, furniture, fixture, and equipment contracts which shall adjust the A/E fee against the actual Contracted Values.
3. As with any construction or renovation project, none can be completed without the incurrence of contract related change orders, modifications to the original contract scope. In simple terms these change orders are the result of unforeseen conditions, owner desired changes, and designer errors/omissions, each such incurrence being a "post-bid" recognition. Such changes require additional services on the part of the A/E, including but not necessarily limited to modifications to contract drawings and specifications, related investigation and research, and other work required to accurately define the proposed and or necessary changes to the current contract requirements. Other than those arising out of errors and omissions, these additional services shall be compensated at the same percentage fee that the original A/E service agreement was based upon. Related fee reconciliations shall occur periodically throughout the duration of the project to adjust the balance due amounts accordingly.

C. Standard A/E Services:

For the purposes of this RFP the standard set of A/E services (upon which the Proposer's fee percentages are based) shall include the following disciplines as further clarified below:

1. Environmental - the contract documents shall identify and specify hazardous material abatement and/or disposal requirements which shall be part of the standard A/E service scope. Any design related field sampling and or testing shall be viewed as a reimbursable expense under the A/E's responsibility. Any third party construction phase monitoring, sampling, or other related services shall be provided by the CM.
2. Civil – any design related field sampling and/or testing shall be viewed as a reimbursable expense under the A/E's scope.
3. Structural, Architectural, Mechanical, Electrical, & Plumbing
4. Commissioning - the contract documents shall identify Building System Commissioning requirements consistent with 2010 FGI standards, differentiating between Contractor and Commissioning Agent responsibilities, this being part of the standard A/E service scope. A/E shall also be responsible for retaining an independent Commissioning Agent as part of its standard service scope.
5. Security & Access Control - the contract documents shall identify project specific extensions and/or expansions to existing security and access control systems, this being part of the standard A/E service scope.
6. Signage & Wayfinding - the contract documents shall identify project specific signage and wayfinding requirements which shall be consistent with ECMCC's standard signage specifications, this being part of the standard A/E service scope.
7. Furniture, Fixtures & Equipment [FF&E] - the contract documents shall identify project specific FF&E requirements, both fixed and movable, differentiating between contractor and owner provided items. A/E shall ensure that all FF&E requirements are accounted for and fully coordinated with the constructed and/or renovated project, this being part of the standard A/E service scope. It is important to note that the A/E **shall not** be compensated for the value of equipment purchased made directly by ECMCC.
8. The CM shall be responsible for the management of the bid and construction phase of each of these above disciplines.
9. The A/E shall be responsible to report on a monthly and a quarterly basis, its own level of MBE/WBE participation and Labor Force Utilization Program compliance, as applicable to the related goals.

D. Extent of Services:

1. Schematic Design through Construction Administration  
Standard A/E Services inclusive of schematic design, design development, construction document, bid/award, and construction administration phases. Denote your proposed fee as a percentage of the Project Specific Contracted Value Range in the appropriate location(s) on the provided proposal sheet(s).

2. Reimbursable Expenses

Reimbursable Expenses for the purposes of this RFP are recognized as a variable (unless otherwise specified) which will be negotiated based upon the eventual scope and extent of the required design services for the individual or group of projects being considered. Qualify in the space provided on the attached proposal sheet(s) or supplemental sheet(s) if necessary, any items or services specifically excluded from your above referenced service fee percentages, those which you would propose to bill separately should such items or services become necessary. **Approved reimbursable expenses shall be billed at cost.**

E. Desired A/E Service Fees:

1. The intent of this RFP is to receive a single service fee for the Emergency Department Modernization Project. This service fee is to be indicated as a percentage of the projects "contracted value" in the appropriate location on the provided proposal sheet, Exhibit E.
2. Attached as Exhibit F find the "Emergency Department Operational Optimization Study" which is provided for the general information of respondents interested in submitting a proposal for the Emergency Department Modernization Project. ECMCC had engaged Cannon Design between March 2014 and August 2014 to conduct a comprehensive survey and analysis of ECMCC's emergency department operations. The primary purpose of this study was to identify future departmental needs, to suggest procedural improvements based on best practices, and to consider varying departmental growth projections. The results of this study shall lead the initial schematic programming and design service discussion for this project; however the use and availability of this information should not be misunderstood as limiting the required A/E services to anything less than full schematic design through construction administration.

VI. EVALUATION CRITERIA:

- A. Quality of relevant project experience (25%).
- A. Quality of references on relevant projects (25%).
- B. Proposed service fee percentage (50%)

VII. M/WBE REQUIREMENTS:

- A. Equal Opportunity and Minority/Women-Owned Business Enterprise Utilization. ECMCC is committed to promote equality of economic opportunity for minority group members and women, and the facilitation of minority and women-owned business enterprise ("MWBE") participation. In accordance with Article 15-A of the New York State Executive Law and the regulations set forth at 5 NYCRR Parts 140-144, by submitting a proposal, the respondent agrees to be bound by the provisions set forth in Exhibit A to this RFP.
- B. M/WBE Utilization Plan. If Exhibit A reflects that M/WBE participation goals apply to this RFP, Respondents are required to submit (unless specified otherwise) an M/WBE Utilization Plan (see Exhibit A-1) with their proposal in accordance with 5 NYCRR 142.6(a). The M/WBE Utilization Plan should list each NYS Certified M/WBE the respondent intends to

utilize to perform the contract, a description of the scope of work to be performed by each M/WBE, and the estimated or, if known, actual dollar amounts to be paid to each M/WBE. Respondents shall utilize M/WBEs as subcontractors, subconsultants, suppliers, and/or enter into joint venture or teaming agreements with M/WBEs in order to comply with the M/WBE utilization requirements set forth in Exhibit A.

- C. M/WBE Respondents. In the event that a respondent is a certified M/WBE, the respondent must utilize at least one other MBE or WBE firm to satisfy the total M/WBE goals of the RFP. For example, if the respondent is a certified MBE, the respondent must engage WBE participation to satisfy the total M/WBE goal. If the respondent is a WBE, the respondent must engage MBE participation in order to satisfy the total M/WBE goal.
  
- D. Excluded Contracts. In the event that Exhibit A reflects a **zero percent (0%)** utilization goal applicable to this RFP, the RFP is for an expenditure that is excluded from ECMCC's M/WBE program and respondents are **not required** to submit an MWBE Utilization Plan. However, respondents are still encouraged to solicit MWBE utilization and to submit an M/WBE Goal Plan, and ECMCC may consider respondent's proposed M/WBE utilization in determining which proposal represents the best value to ECMCC.
  
- E. Diversity Practices. Respondents are encouraged to submit information regarding vendor's diversity practices, which ECMCC may consider in determining which proposal represents the best value to ECMCC.

#### VIII. GENERAL INSTRUCTIONS TO RESPONDENTS:

- A. **The proposal** must be submitted following the outline format of the RFP (i.e. answer questions and submit requirements in the same order and under the same heading as the outline), or the response will not be considered. The response must be typed and original autograph signatures in ink are required. Facsimile or rubber stamp signatures will not be accepted.
  
- B. **Any change in wording or interlineations by a respondent of the inquiry** as published by ECMCC shall be reason to reject the proposal of such respondent, or in the event that such change in the RFP is not discovered prior to entering into a contract, to void any contract entered into pursuant to such RFP.
  
- C. **For the purpose of determining which respondent is the lowest qualified responsible vendor**, it shall be the obligation of all respondents to present information and documentation to ECMCC to establish that the respondent possesses sufficient capital resources, skill, judgment and experience to perform the work or deliver the material, as per the RFP scope of services and specifications. ECMCC does not obligate itself to accept the lowest or any other proposal.
  
- D. **Failure to perform** or meet delivery schedules as per the accepted proposal may result in legal action by ECMCC to recover damages.
  
- E. **No taxes are to be billed to ECMCC**. Proposals shall not include any Federal, State or local excise, sales, transportation or other tax, unless Federal or State law specifically levies such tax on purchases made by a political subdivision. The ECMCC purchase order is an exemption certificate. Any applicable taxes from which ECMCC is not exempt shall be listed separately as cost elements and added into the total net price.

- F. **The successful respondent may not assign, transfer, convey, sublet or otherwise dispose** of any contract awarded pursuant to this RFP, or respondent's, right, title, or interest therein, or respondent's power to execute such contract, to any other person or corporation without ECMCC's prior written consent. An assignment or transfer without ECMCC's prior written consent shall revoke and annul such contract, and ECMCC shall be relieved and discharged from any and all liability and obligations under such contract to the contractor, and to the person or corporation to which the contract has been assigned, transferred, conveyed, sublet or otherwise disposed of, and the contractor, and his assignees, transferees or sublessees shall forfeit and lose all moneys earned under such contract, except so much as may be required to pay his employees. The provisions of this section shall not hinder, prevent, or affect an assignment by any such contractor for the benefit of his creditors made pursuant to the laws of the State of New York.
- G. **The successful respondent shall comply with all laws, rules, regulations and ordinances** of the Federal Government, the State of New York and any other political subdivision or regulatory body which may apply to its performance under this contract.
- H. **Insurance** shall be procured by the successful respondent before commencing work and no later than fourteen (14) days after notice of award, which insurance shall be maintained without interruption for the duration of the Contract in the kinds and amounts specified by ECMCC. If the insurance is not provided in acceptable form within this period of time, then the Director of Purchasing may declare the vendor non-responsible and award the contract to the next lowest responsible vendor. Certificates of insurance shall be furnished by the successful respondent in conformity with the ECMCC Standard Insurance Certificate.
- I. **Any cash discount** which is part of a proposal will be considered as a reduction in price in determining the award of the proposal.
- J. **ECMCC may, as the need arises, through the Director of Purchasing, order changes** in the work through additions, deletions or modifications without invalidating the contract. Compensation, as it may be affected by any change, shall be adjusted by agreement between the contractor and ECMCC through the Director of Purchasing.
- K. **Any additional information** which the respondent desires to add to the response shall be attached to and submitted with the formal sealed response on a separate sheet of paper.
- L. **The successful respondent** to whom a contract is awarded shall defend, hold harmless and indemnify ECMCC and its agents and employees from and against all claims, damages, losses or causes of action arising out of or resulting from such vendor's performance pursuant to such contract.
- M. **The proposal is firm and irrevocable for a period of 60 days** from the date and time of the proposal opening. If a contract is not awarded within the 60 day period, a respondent to whom the contract has not been awarded may withdraw his proposal by serving written notice of his intention to do so upon the ECMCC Purchasing Department.
- N. **Prices charged to ECMCC** are to be no higher than those offered to any other governmental or commercial consumer. If respondent's organization has a New York State or a Federal GSA contract for any of the items covered in this RFP or any similar items, respondent shall so indicate in its proposal and supply a copy of such contract within five (5) days of a request by ECMCC.
- O. **Price is firm.** The unit prices shall remain firm, and any other pricing, quote or charges in the proposal shall also remain firm, for delivery of the equipment, material, work or services



described in this RFP. No cost increase not covered in the proposal shall be charged for any reason whatsoever unless agreed upon by ECMCC.

- P. **Extension of price protection.** Any contract entered into pursuant to this RFP to supply the ECMCC requirements of goods and/or services for a definite period of time as stated in the attached specifications may be extended for not more than two (2) successive periods of equal length at the same proposal price upon the mutual agreement of the successful respondent and ECMCC. All extensions shall be submitted in writing and shall have prior approval by the ECMCC Director of Purchasing.
- Q. **In executing this proposal,** the respondent affirms that all of the requirements of the specifications are understood and accepted by the respondent, and that the prices quoted include all required materials and services. The undersigned has checked all of the proposal figures and understands that ECMCC will not be responsible for any errors or omissions on the part of the undersigned in preparing the proposal. Mistakes or errors in the estimates, calculations or preparation of the proposal shall not be grounds for the withdrawal or correction of the proposal or proposal security.

- R. **The following executory clause shall be a part of any agreement entered into pursuant to this RFP:**

It is understood by the parties that this agreement shall be executory only to the extent of the monies available to the Erie County Medical Center Corporation and appropriated therefore, and no liability on account thereof shall be incurred by the Erie County Medical Center Corporation beyond the monies available and appropriated for the purpose thereof. It is understood that neither this contract nor any representation by any public employee or officer creates any legal or moral obligation to request, appropriate or make available monies for the purpose of the contract.

- S. **Restrictions on contact during the RFP process.** Pursuant to State Finance Law Sections 139-j and 139-k, this RFP includes and imposes certain restrictions on communication between respondents and ECMCC during the procurement process. A respondent is restricted from making contacts from the date the RFP is issued through the final award and approval of the procurement contract by ECMCC (the "Restricted Period"). During the Restricted Period, respondents may only contact the designated contact regarding this RFP. The designated contact is identified on the cover page of this RFP. Respondents are responsible for reviewing ECMCC's Procurement Disclosure Policy and complying with State Finance Law Sections 139-j and 139-k. Directors, officer and employees of ECMCC are required to record certain information when contacted during the Restricted Period. A review of whether such contacts were permissible contacts will be considered in connection with any determination of responsibility of the respondent. Failure of any respondent to timely certify or to disclose accurate and complete information or the submission of any intentionally false or intentionally incomplete certification may result in the rejection of the contract award or if such contract has been executed, then the immediate termination of the contract. Violations may result in debarment of the respondent from proposing on or obtaining governmental procurement contracts in the State of New York.
- T. **Freedom of Information Law.** During the evaluation process, the content of each RFP will be held in confidence and details of any RFP will not be revealed (except as may be required under the Freedom of Information Law or other State law). The Freedom of Information Law provides for an exemption from disclosure for trade secrets or information the disclosure of which would cause injury to the competitive position of commercial enterprises. This exception would be effective both during and after the evaluation process. If the proposal contains any such trade secrets or other confidential or proprietary

information, the respondent must submit a request to exempt such information from disclosure. Such request must be in writing, must state the reasons why the information should be exempt from disclosure and must be provided at the time of submission of the subject information. Requests for exemption of the entire contents of a proposal from disclosure have generally not been found to be meritorious and are discouraged. Respondents must limit any requests for exemption of information from disclosure to bona fide trade secrets or specific information, the disclosure of which would cause a substantial injury to the respondent's competitive position. ECMCC assumes no responsibility for disclosure of unmarked data for any purpose. ECMCC will review such designations in making its determination whether disclosure is required, which determination shall be binding on the respondent.

## EXHIBIT A

### ERIE COUNTY MEDICAL CENTER CORPORATION MWBE AND EEO PROGRAM REQUIREMENTS

#### **I. General Provisions**

- A. ECMCC is required to implement the provisions of New York State Executive Law Article 15-A and 5 NYCRR Parts 142-144 (“MWBE Regulations”) for all State contracts as defined therein, with a value (1) in excess of \$25,000 for labor, services, equipment, materials, or any combination of the foregoing or (2) in excess of \$100,000 for real property renovations and construction.
- B. The Contractor agrees, in addition to any other nondiscrimination provision of the Contract and at no additional cost to the ECMCC, to fully comply and cooperate with ECMCC in the implementation of New York State Executive Law Article 15-A. These requirements include equal employment opportunities for minority group members and women (“EEO”) and contracting opportunities for New York State certified minority and women-owned business enterprises (“MWBEs”). Contractor’s demonstration of “good faith efforts” pursuant to 5 NYCRR §142.8 shall be a part of these requirements. These provisions shall be deemed supplementary to, and not in lieu of, the nondiscrimination provisions required by New York State Executive Law Article 15 (the “Human Rights Law”) or other applicable federal, state or local laws.
- C. Failure to comply with all of the requirements herein may result in a finding of non-responsiveness, non-responsibility and/or a breach of contract, leading to the withholding of funds or such other actions, liquidated damages pursuant to Section VII of this Appendix or enforcement proceedings as allowed by the Contract.

#### **II. Contract Goals**

- A. For purposes of this Contract, ECMCC hereby establishes an overall goal of 20% for Minority and Women-Owned Business Enterprises (“MWBE”). No specific goals for Minority-Owned Business Enterprises (“MBE”) and Women-Owned Business Enterprises (“WBE”) participation shall be assigned to this Contract.
- B. For purposes of providing meaningful participation by MWBEs on the Contract and achieving the Contract Goals established in Section II-A hereof, Contractor should reference the directory of New York State Certified MBWEs found at the following internet address:

<http://www.esd.ny.gov/mwbe.html>

Additionally, Contractor is encouraged to contact ECMCC’s MWBE Coordinator at ((716) 898-4947) and the Division of Minority and Woman Business Development ((518) 292-5250; (212) 803-2414; or (716) 846-8200) to discuss additional methods of maximizing participation by MWBEs on the Contract.

- C. Where MWBE goals have been established herein, pursuant to 5 NYCRR §142.8, Contractor must document “good faith efforts” to provide meaningful participation by MWBEs as subcontractors or suppliers in the performance of the Contract. In accordance with Section 316-a of Article 15-A and 5 NYCRR §142.13, the Contractor acknowledges

## EXHIBIT A

that if Contractor is found to have willfully and intentionally failed to comply with the MWBE participation goals set forth in the Contract, such a finding constitutes a breach of contract and the Contractor shall be liable to ECMCC for liquidated or other appropriate damages, as set forth herein.

### III. Equal Employment Opportunity (EEO)

- A. Contractor agrees to be bound by the provisions of Article 15-A and the MWBE Regulations promulgated by the Division of Minority and Women's Business Development of the Department of Economic Development (the "Division"). If any of these terms or provisions conflict with applicable law or regulations, such laws and regulations shall supersede these requirements.
- B. Contractor shall comply with the following provisions of Article 15-A:
  1. Contractor and Subcontractors shall undertake or continue existing EEO programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status. For these purposes, EEO shall apply in the areas of recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation.
  2. The Contractor shall submit an EEO policy statement to ECMCC within forty-eight (48) hours after the date of the notice by ECMCC to award the Contract to the Contractor.
  3. If Contractor does not have an existing EEO policy statement, Contractor may adopt the attached model statement (Minority and Women-Owned Business Enterprises Equal Employment Opportunity Policy Statement).
  4. The Contractor's EEO policy statement shall include the following language:
    - a. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability or marital status, will undertake or continue existing EEO programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination, and shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force.
    - b. The Contractor shall state in all solicitations or advertisements for employees that, in the performance of the contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.
    - c. The Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written

## EXHIBIT A

statement that such employment agency, labor union, or representative will not discriminate on the basis of race, creed, color, national origin, sex age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein.

- d. The Contractor will include the provisions of Subdivisions (a) through (c) of this Subsection 4 and Paragraph "E" of this Section III, which provides for relevant provisions of the Human Rights Law, in every subcontract in such a manner that the requirements of the subdivisions will be binding upon each subcontractor as to work in connection with the Contract.

### C. Staffing Plan

To ensure compliance with this Section, the Contractor shall submit a staffing plan to document the composition of the proposed workforce to be utilized in the performance of the Contract by the specified categories listed, including ethnic background, gender, and Federal occupational categories. Contractors shall complete the Staffing plan form and submit it as part of their bid or proposal or within a reasonable time, but no later than the time of award of the contract.

### D. Workforce Employment Utilization Report ("Workforce Report")

1. Once a contract has been awarded and during the term of Contract, Contractor is responsible for updating and providing notice to ECMCC of any changes to the previously submitted Staffing Plan. This information is to be submitted on a quarterly basis during the term of the contract to report the actual workforce utilized in the performance of the contract by the specified categories listed including ethnic background, gender, and Federal occupational categories. The Workforce Report must be submitted to report this information.
2. Separate forms shall be completed by Contractor and any subcontractor performing work on the Contract.
3. In limited instances, Contractor may not be able to separate out the workforce utilized in the performance of the Contract from Contractor's and/or subcontractor's total workforce. When a separation can be made, Contractor shall submit the Workforce Report and indicate that the information provided related to the actual workforce utilized on the Contract. When the workforce to be utilized on the contract cannot be separated out from Contractor's and/or subcontractor's total workforce, Contractor shall submit the Workforce Report and indicate that the information provided is Contractor's total workforce during the subject time frame, not limited to work specifically under the contract.

- E. Contractor shall comply with the provisions of the Human Rights Law, all other State and Federal statutory and constitutional non-discrimination provisions. Contractor and subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status, and shall also follow the requirements of the Human Rights Law

## EXHIBIT A

with regard to non-discrimination on the basis of prior criminal conviction and prior arrest.

### **IV. MWBE Utilization Plan**

- A. The Contractor represents and warrants that Contractor has submitted an MWBE Utilization Plan either prior to, or at the time of, the execution of the Contract.
- B. Contractor agrees to use such MWBE Utilization Plan for the performance of MWBEs on the Contract pursuant to the prescribed MWBE goals set forth in Section III-A of this Appendix.
- C. Contractor further agrees that a failure to submit and/or use such MWBE Utilization Plan shall constitute a material breach of the terms of the Contract. Upon the occurrence of such a material breach, ECMCC shall be entitled to any remedy provided herein, including but not limited to, a finding of Contractor non-responsiveness.

### **V. Waivers**

- A. If the Contractor, after making good faith efforts, is unable to comply with MWBE goals, the Contractor may submit a Request for Waiver form documenting good faith efforts by the Contractor to meet such goals. If the documentation included with the waiver request is complete, ECMCC shall evaluate the request and issue a written notice of acceptance or denial within twenty (20) days of receipt.
- B. If the ECMCC, upon review of the MWBE Utilization Plan and updated Quarterly MWBE Contractor Compliance Reports determines that Contractor is failing or refusing to comply with the Contract goals and no waiver has been issued in regards to such non-compliance, ECMCC may issue a notice of deficiency to the Contractor. The Contractor must respond to the notice of deficiency within seven (7) business days of receipt. Such response may include a request for partial or total waiver of MWBE Contract Goals.

### **VI. Quarterly MWBE Contractor Compliance Report**

Contractor is required to submit a Quarterly MWBE Contractor Compliance Report to ECMCC by the 10<sup>th</sup> day following each end of quarter over the term of the Contract documenting the progress made towards achievement of the MWBE goals of the Contract.

### **VII. Liquidated Damages - MWBE Participation**

- A. Where ECMCC determines that Contractor is not in compliance with the requirements of the Contract and Contractor refuses to comply with such requirements, or if Contractor is found to have willfully and intentionally failed to comply with the MWBE participation goals, Contractor shall be obligated to pay to ECMCC liquidated damages.
- B. Such liquidated damages shall be calculated as an amount equaling the difference between:
  - 1. All sums identified for payment to MWBEs had the Contractor achieved the contractual MWBE goals; and

## EXHIBIT A

2. All sums actually paid to MWBEs for work performed or materials supplied under the Contract.
- C. In the event a determination has been made which requires the payment of liquidated damages and such identified sums have not been withheld by the ECMCC, Contractor shall pay such liquidated damages to ECMCC within sixty (60) days after they are assessed by ECMCC unless prior to the expiration of such sixtieth day, the Contractor has filed a complaint with the Director of the Division of Minority and Woman Business Development pursuant to Subdivision 8 of Section 313 of the Executive Law in which event the liquidated damages shall be payable if Director renders a decision in favor of the ECMCC.

**MINORITY AND WOMEN-OWNED BUSINESS ENTERPRISES – EQUAL  
EMPLOYMENT OPPORTUNITY POLICY STATEMENT**

**M/WBE AND EEO POLICY STATEMENT**

I, \_\_\_\_\_, the (awardee/contractor) \_\_\_\_\_ agree to adopt the following policies with respect to the project being developed or services rendered at \_\_\_\_\_

**M/WBE** This organization will and will cause its contractors and subcontractors to take good faith actions to achieve the M/WBE contract participations goals set by the State for that area in which the State-funded project is located, by taking the following steps:

- (1) Actively and affirmatively solicit bids for contracts and subcontracts from qualified State certified MBEs or WBEs, including solicitations to M/WBE contractor associations.
- (2) Request a list of State-certified M/WBEs from AGENCY and solicit bids from them directly.
- (3) Ensure that plans, specifications, request for proposals and other documents used to secure bids will be made available in sufficient time for review by prospective M/WBEs.
- (4) Where feasible, divide the work into smaller portions to enhanced participations by M/WBEs and encourage the formation of joint venture and other partnerships among M/WBE contractors to enhance their participation.
- (5) Document and maintain records of bid solicitation, including those to M/WBEs and the results thereof. Contractor will also maintain records of actions that its subcontractors have taken toward meeting M/WBE contract participation goals.
- (6) Ensure that progress payments to M/WBEs are made on a timely basis so that undue financial hardship is avoided, and that bonding and other credit requirements are waived or appropriate alternatives developed to encourage M/WBE participation.

**EEO** (a) This organization will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability or marital status, will undertake or continue existing programs of affirmative action to ensure that minority group members are afforded equal employment opportunities without discrimination, and shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on state contracts.

(b) This organization shall state in all solicitation or advertisements for employees that in the performance of the State contract all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex disability or marital status.

(c) At the request of the contracting agency, this organization shall request each employment agency, labor union, or authorized representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of this organization's obligations herein.

(d) Contractor shall comply with the provisions of the Human Rights Law, all other State and Federal statutory and constitutional non-discrimination provisions. Contractor and subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status, and shall also follow the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal conviction and prior arrest.

(e) This organization will include the provisions of sections (a) through (d) of this agreement in every subcontract in such a manner that the requirements of the subdivisions will be binding upon each subcontractor as to work in connection with the State contract

Agreed to this \_\_\_\_\_ day of \_\_\_\_\_, 2\_\_\_\_\_

By \_\_\_\_\_

Print: \_\_\_\_\_ Title: \_\_\_\_\_



**EXHIBIT A-1  
M/WBE UTILIZATION PLAN**

**INSTRUCTIONS:** This form must be submitted with any bid, proposal, or proposed negotiated contract or within a reasonable time thereafter, but prior to contract award. This Utilization Plan must contain a detailed description of the supplies and/or services to be provided by each certified Minority and Women-owned Business Enterprise (M/WBE) under the contract. Attach additional sheets if necessary.

**Offeror's Name:**  
**Address:**  
**City, State, Zip Code:**  
 Telephone No.:  
**Authorized Representative:**  
**Authorized Signature:**

**Federal Identification No.:**  
**Location of Work:** \_\_\_\_\_  
**RFP or Bid No.:**  
**M/WBE Goals in the Contract:** 20%  
**EEO Goals in the Contract:** ~~10%~~

1. Certified M/WBE Subcontractors/Suppliers Name, Address, Email Address, Telephone No.	2. Classification	3. Federal ID No.	4. Detailed Description of Work (Attach additional sheets, if necessary)	5. Dollar Value of Subcontracts/ Supplies/Services and intended performance dates of each component of the contract.
1.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE <input type="checkbox"/> WBE			
2.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE <input type="checkbox"/> WBE			
3.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE <input type="checkbox"/> WBE			
4.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE <input type="checkbox"/> WBE			
5.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE <input type="checkbox"/> WBE			
6.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE <input type="checkbox"/> WBE			
7.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE			

	<input type="checkbox"/> WBE			
8.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE <input type="checkbox"/> WBE			
9.	<b>NYS ESD CERTIFIED</b> <input type="checkbox"/> MBE <input type="checkbox"/> WBE			

**6. IF UNABLE TO FULLY MEET THE MBE AND WBE GOALS SET FORTH IN THE CONTRACT, OFFEROR MUST SUBMIT A REQUEST FOR WAIVER FORM (M/WBE 104).**

<b>PREPARED BY (Signature):</b> <b>DATE:</b> <b>NAME AND TITLE OF PREPARER (Print or Type):</b> SUBMISSION OF THIS FORM CONSTITUTES THE OFFEROR'S ACKNOWLEDGEMENT AND AGREEMENT TO COMPLY WITH THE M/WBE REQUIREMENTS SET FORTH UNDER NYS EXECUTIVE LAW, ARTICLE 15-A, 5 NYCRR PART 143, AND THE ABOVE-REFERENCED SOLICITATION. FAILURE TO SUBMIT COMPLETE AND ACCURATE INFORMATION MAY RESULT IN A FINDING OF NONCOMPLIANCE AND POSSIBLE TERMINATION OF YOUR CONTRACT.	<b>TELEPHONE NO.:</b>	<b>EMAIL ADDRESS:</b>
--	-----------------------	-----------------------

	<b>FOR ECMCC M/WBE USE ONLY</b>	
	<b>REVIEWED BY:</b>	<b>DATE:</b>
	<b>UTILIZATION PLAN APPROVED:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO Date: _____ <b>Contract No.:</b> _____ <b>Project No. (if applicable):</b> _____  <b>Contract Award Date:</b> _____  <b>Estimated Date of Completion:</b> _____  <b>Amount Obligated Under the Contract:</b> _____  <b>Description of Work:</b> _____  <b>NOTICE OF DEFICIENCY ISSUED:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO Date: _____  <b>NOTICE OF ACCEPTANCE ISSUED:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO Date: _____	

**EXHIBIT B  
RESPONDENT DATA**

To facilitate correct drawing and execution of a contract for services, respondents shall supply full information concerning legal status:

Firm Name: \_\_\_\_\_

Any trade name or assumed name ("d/b/a"): \_\_\_\_\_

Address of principal office:

Street: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Check one:

- CORPORATION
- LIMITED LIABILITY COMPANY
- PARTNERSHIP
- INDIVIDUAL

Formed under the laws of the state of: \_\_\_\_\_.

If a foreign entity, state whether authorized to do business in the State of New York:

- YES
- NO

Is respondent a New York State certified minority-owned or women-owned business enterprise listed in the online State Directory? (If so, please provide a copy of the NYS Certificate with proposal).

- YES
- NO

Address of Local Office:

Street: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Names and addresses of all directors and officers (or managers if an LLC):

\_\_\_\_\_  
\_\_\_\_\_

Names and percentage ownership interest of all shareholders, partners, or members:

\_\_\_\_\_  
\_\_\_\_\_

EXHIBIT C  
NON-COLLUSIVE BIDDING CERTIFICATION

By submission of this proposal, each respondent and each person signing on behalf of any respondent certifies, and in the case of a joint proposal each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his knowledge and belief:

- 1) The prices in this proposal have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other respondent or with any competitor;
- 2) Unless otherwise required by law, the prices which have been quoted in this proposal have not been knowingly disclosed by the respondent and will not knowingly be disclosed by the respondent prior to opening, directly or indirectly, to any other respondent or to any competitor; and
- 3) No attempt has been made or will be made by the respondent to induce any other person, partnership, limited liability company or corporation to submit or not to submit a proposal for the purpose of restricting competition.

**NOTICE**

(Penal Law, Section 210.45)

IT IS A CRIME, PUNISHABLE AS A CLASS A MISDEMEANOR UNDER THE LAWS OF THE STATE OF NEW YORK, FOR A PERSON, IN AND BY A WRITTEN INSTRUMENT, TO KNOWINGLY MAKE A FALSE STATEMENT, OR TO MAKE A FALSE STATEMENT, OR TO MAKE A STATEMENT WHICH SUCH PERSON DOES NOT BELIEVE TO BE TRUE.

Affirmed under penalty of perjury this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Print Name and Title

EXHIBIT D  
STATE FINANCE LAW §§ 139-J AND 139-K  
DISCLOSURE, AFFIRMATION AND CERTIFICATION

I. Contractor Disclosure of Findings of Non-Responsibility and Prior Contract Terminations or Withholdings under State Finance Law §139-j:

Name of Individual or Entity Seeking to Enter into the Procurement Contract:

\_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Name and Title of Person Submitting this Form: \_\_\_\_\_

\_\_\_\_\_

Contract Procurement Number: \_\_\_\_\_

Date: \_\_\_\_\_

1. Has any Governmental Entity made a finding of non-responsibility regarding the individual or entity seeking to enter into the Procurement Contract in the previous four years? (Please circle):

No                      Yes

If yes, please answer the next questions:

2. Was the basis for the finding of non-responsibility due to a violation of State Finance Law §139-j? (Please circle):

No                      Yes

3. Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity? (Please circle):

No                      Yes

4. If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.

Governmental Entity: \_\_\_\_\_

Date of Finding of Non-responsibility: \_\_\_\_\_

Basis of Finding of Non-Responsibility: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(Add additional pages as necessary)

5. Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named individual or entity due to the intentional provision of false or incomplete information? (Please circle):

No

Yes

6. If yes, please provide details below.

Governmental Entity: \_\_\_\_\_

Date of Termination or Withholding of Contract: \_\_\_\_\_

Basis of Termination or Withholding: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Add additional pages as necessary)

Contractor certifies that all information provided to the Governmental Entity with respect to State Finance Law §139-k is complete, true and accurate.

By: \_\_\_\_\_ Date: \_\_\_\_\_

Signature

Name: \_\_\_\_\_

Title: \_\_\_\_\_

II. Contractor Affirmation Relating to Procedures Governing Permissible Contacts:

Contractor affirms that it understands and agrees to comply with the procedures of Erie County Medical Center Corporation relative to permissible contacts as required by State Finance Law §139-j(3) and §139-j(6)(b).

Date: \_\_\_\_\_ By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Contractor Name: \_\_\_\_\_

Contractor Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**EXHIBIT E**

PROPOSING FIRM: \_\_\_\_\_ ECMCC RFP#: \_\_\_\_\_

**ARCHITECTURAL & ENGINEERING SERVICES**

PROPOSED FEE STRUCTURE FOR:

**EMERGENCY DEPARTMENT MODERNIZATION PROJECT**

A preliminary budget has been established for this project inclusive of new construction, renovation and envisioned equipment costs. Proposers are to establish their single service fee percentage for the desired standard A/E services (as specified earlier in this RFP) upon this preliminary budget and are to reflect this percentage in space provided below. It is understood that these budgets are based on current project vision and this budget shall be adjusted to varying degrees as the project design further evolves.

SCHEMATIC DESIGN THROUGH CONSTRUCTION ADMINISTRATION	CONTRACTED VALUE
---	---------------------

Total Applicable Budget / Total Anticipated Contracted Value ..... **24 million (+/-)**

**Proposed A/E Service Percentage Fee**..... \_\_\_\_\_ %

**PROPOSED REIMBURSABLE EXPENSES**

Reimbursable Expenses for the purposes of this RFP are recognized as a variable which will be negotiated based upon the eventual scope and extent of the required design services for this individual project. Qualify in the space provided below or on supplemental sheet(s) as may be necessary, any items or services specifically excluded from your above referenced service fee percentage which shall billed separately should such items or services become necessary.

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# Erie County Medical Center Emergency Department Operational Optimization Final Report Summary



SUMMARY DOCUMENTATION  
August 2014

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This study has been a collective and collaborative effort of many people. Special acknowledgements go to all who gave generously of their time and dedication to aid in the development of this study.

- Debbie Clark, Director, Radiology
- Rich Cleland, President, Chief Operating Officer, Interim Chief Executive Officer
- Peggy Cramer, Vice President, Emergency Department
- John Eichner, Controller
- Douglas Flynn, Assistant Vice President, Facilities and Construction Management
- Joe Kabaciniski, Director of Laboratory Services
- Charlene Ludlow, Chief Safety Officer
- Michael Manka, MD, Chief, Emergency Department
- Brian Murray, MD, Chief Marketing Officer
- Donna Oddo, Manager, Emergency Department
- Thomas J. Quatroche Jr., Senior Vice President, Marketing, Planning and Business Development
- Michael Sammarco, Chief Financial Officer
- Karen Ziemianski, Senior Vice President, Nursing

<b>1.0</b>	<b>EXECUTIVE SUMMARY</b> Strategic Context Recommendations
<b>2.0</b>	<b>PROJECT PROCESS SUMMARY</b> Project Process Interviews
<b>3.0</b>	<b>CURRENT STATE SUMMARY</b> Current State Process Mapping Key Themes Current State Assessment
<b>4.0</b>	<b>PROGRAM ASSUMPTIONS</b> ED Growth Scenarios Radiology Forecast
<b>5.0</b>	<b>VISIONING</b> Visioning Process Visioning Exercises
<b>6.0</b>	<b>RECOMMENDATIONS</b>

**EXECUTIVE SUMMARY**

Erie County Medical Center engaged CannonDesign, an architecture, engineering and design firm, to conduct a comprehensive operational and planning study of Erie's emergency department operations. The primary goals were to develop a thorough understanding of the vision for these services and determine the optimal physical layout of a redesigned emergency department.

From March 2014 to August 2014, Cannon Design collaborated closely with an advisory group of key ECMC leaders and stakeholders, interviewed 12 individuals across multiple departments directly involved in providing patient care, and toured the peer site facilities. This study focuses on the future emergency department needs of ECMC and the corresponding facility requirements to meet projected needs while factoring in best practices and safety.

### **Phase 1: Current State Validation & Process Flow Mapping**

The Current State phase begins with developing a comprehensive understanding of the current state of ECMC's operations, market share and facility issues and needs. A comprehensive data request was submitted and fulfilled. The CannonDesign team evaluated the data to understand how ECMC currently performs with respect to clinical quality and outcomes, operations, patient throughput, and service excellence. In this phase, CannonDesign engaged a diverse group of stakeholders including the ECMC leadership team, directors and managers, providers and staff, and support service representatives to develop a clear understanding of the current strengths, challenges and opportunities for ECMC.

### **Phase 2: Visioning the Optimal ED Experience**

During the Vision Phase, CannonDesign conducted five future state visioning sessions to determine optimal future state processes and future performance targets. The visioning sessions were broken out by department and stage of care. The purpose of these visioning sessions was to gain consensus on what success might look like in the future and to use this information to inform the design concepts.

### **Phase 3: Development of Preferred Future State Facility Options**

In this phase of work, CannonDesign developed high-level facility recommendations based on the assessment from the prior two phases. The space program developed was based on a variety of factors including current and projected emergency services demand, future service scenarios, and functional assumptions that were translated into a conceptual floor plan.

Erie County Medical Center Corporation (ECMCC) is an academic medical center with 550 inpatient beds, 30+ outpatient specialty care services, and a 390 bed long-term care facility and is the adult regional center for trauma, burn care, rehabilitation. ECMCC is also a major teaching facility for the State University of New York at Buffalo. ECMCC is a member of the Great Lakes Health System, the largest healthcare network in Western NY. The Great Lakes Health System is comprised of Kaleida Health, University at Buffalo, Erie County Medical Center and The Center for Hospice & Palliative Care.

On January 16, 2014, Erie County Medical Center Corp. dedicated a new Psychiatry Emergency Room, Outpatient Mental health and drug dependency treatment center, completing a 25 million regional behavioral health center. The new center houses 162 inpatient beds, 18 detoxification beds and 20 inpatient chemical dependency beds.

ECMCC ED predominantly draws from its immediate service area, with 81% of cases in 2013 originating within a twenty minute drive time away from the hospital. With the only comprehensive psychiatry emergency room (CPEPE) in western New York, ECMC faces an increasing behavior health population in the ED. The majority of ECMC visits comprise of public payors and self pay at 43% , 20% and 13% for Medicaid, Medicare and self-pay respectively. Medicare and Medicaid visits have steadily increased in the most recent three years and with Medicaid expansion are projected to continue to grow.

A number of factors will influence demand for services over the next ten years. Cannon Design worked with key stakeholders at ECMC to visualize the optimal experience for patients and staff, translating the vision into future facility options for the capital campaign. A number of key themes emerged from the study, including:



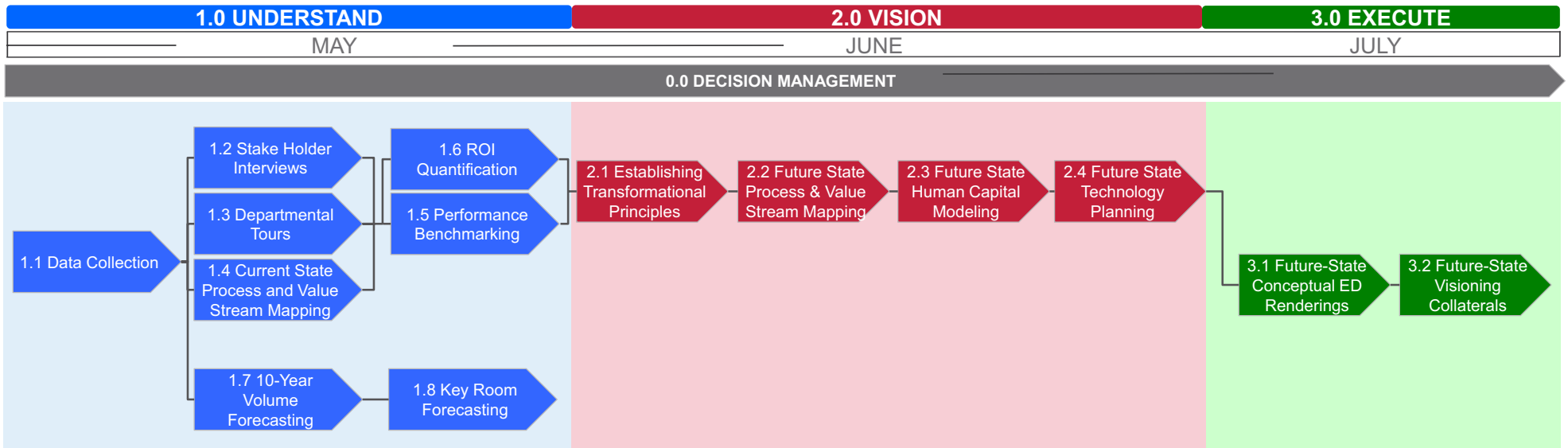
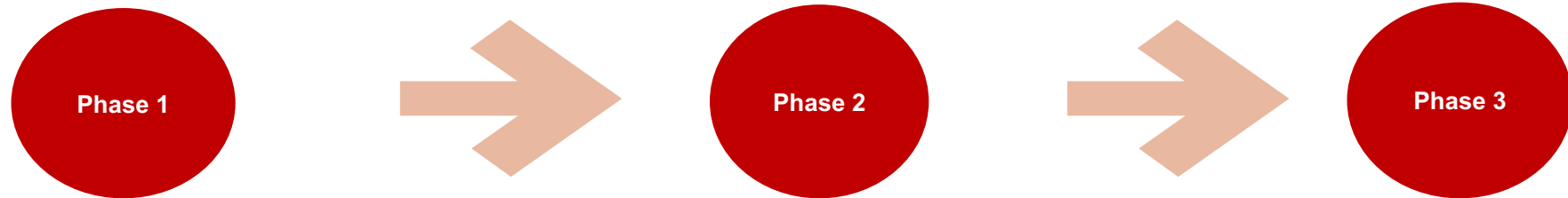
- Future facility layout will strive to optimize best practices and allow for increased efficiencies for staff and patient flow not in current footprint.
- Operating climate will be characterized by pressure from health care reform to deliver care to an expanded insured population while focusing on performance and quality.
- ECMC will see continued growth for its emergency services including latent demand for Psychiatric services through its CPEP
- As a public hospital ECMC will face the challenge of balancing growing investment demands, improving quality outcomes and a challenging payor platform. ECMC will need to continue to uphold its core values of access, excellence and stewardship in providing the best clinical care to every patient and best education for its students and staff.

**PROJECT PROCESS SUMMARY**



The process began with the collection and analysis of existing data and processes at ECMC The process was composed of the following phases:

- Phase 1: Understand
- Phase 2: Vision
- Phase 3: Execute



***CURRENT STATE SUMMARY***  
**CURRENT STATE MAPPING & KEY THEMES**

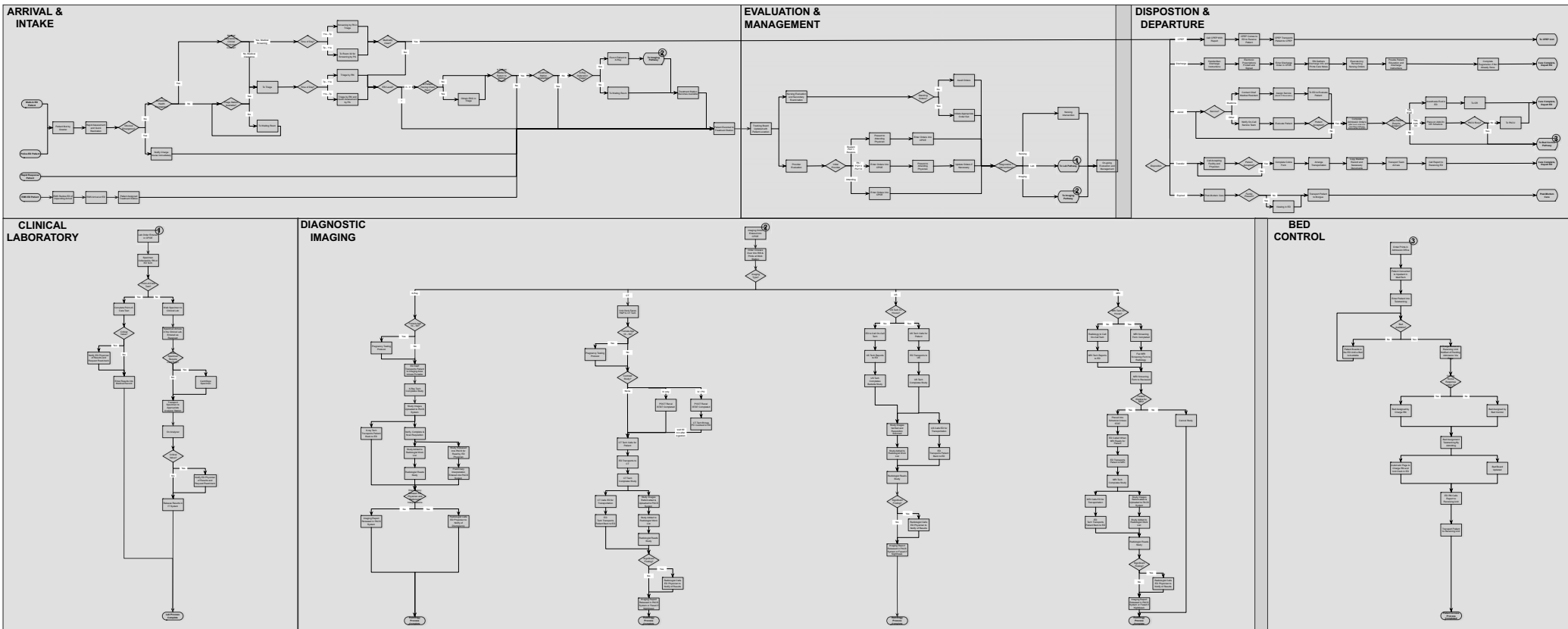
## DESCRIPTION

In July 2014 CannonDesign conducted a current state mapping session covering the continuum of care from arrival through discharge/admission from the emergency department environments with frontline staff and service line representatives. Current state process maps documented the sequence of linked activities through which services are provided to patients in the current emergency and diagnostic environments.

## PURPOSE

- Allow for investigation into **potential process failures** and operational barriers
- Clarify and communicate how **processes work today**
- **Identify primary operational barriers** that can be targeted for improvement
- Lay the **groundwork for the future state** visioning and future state designs
- Process mapping outputs should reflect how the **processes are currently and commonly performed today**, not how you want it to work in the future

Current state process flow maps were used to gain understanding of the current process in the ECMC Emergency Department, as it details appropriate patient flows and key decision points.



**Key Themes – Quality & Outcomes****Patient and Staff Experience is Compromised by the Current Facility**

- High-performing academic Emergency Department and trauma center despite challenges presented by physical plant
- Clinical staff at point of entry accelerates identification of potential emergency medical conditions
- Current physical layout created visual and auditory zones of isolation in the Emergency Department
- Increase in behavior health population has created challenges in delivering optimal care to non-behavioral health population
- Throughput in Emergency Department presents roadblocks to improving patient care
- Model of fracture care in the Emergency Department is unique, may represent over-specialization of clinical services to respond to global challenges in the department
- Emergency Department not under continuous lock-down presents a security risk

**Key Themes – Fiscal Stewardship****Optimizing the ED Throughput will Lead to Financial Success**

- ED has generally been a loss leader due to high proportion of public payors and self-pay populations
- Revenue loss from walk-outs is considerable and should serve as an incentive to address the situation
- Lack of volume from outside immediate catchment area negatively impacts overall financial performance
- Decreasing DSH payments create a need to optimize throughput in Emergency Department as much as possible

**Key Themes – Operational Efficiency****Certain processes excel while others are inefficient**

- Walk-in patient intake process highly efficient
- Existing capacity and physical constraints limit operational efficiencies
- Opportunities exist to accelerate diagnostics and better leverage PA in triage area
- Lab TAT delayed by specimen delivery to the lab
- Inefficient admission process and inpatient boarding negatively impact overall LOS for all patients
- Behavioral health model of care is best-in-class but opportunities exist to improve linkages with Emergency Department

**Key Themes – Alignment & Integration****Performance goals are a top priority for the ED staff**

- Tight-knit culture focused on continuous improvement, as evidenced by current performance improvement initiatives
- Opportunities exist to create linkages between the Emergency Department and the larger continuum of care
- Continued focus on integrating physicians and staff on goals and mission of Emergency Department
- Aligned departmental leadership with a clear understanding of challenges and opportunities for ECMC Emergency Department
- Staff face competing challenges with the layout and constraints of the facility; which often impedes the delivery of quality care

**Key Themes – Service Excellence****High quality care delivered despite physical and environmental constraints**

- The lack of space can create unpleasant and loud experiences for patients and staff
- Increase in Behavior Health patients cited as an employee and consumer dissatisfier
- Patients know they will receive quality care here
- Being able to park in close proximity is a major issue
- Crowd control on the ramp can be problematic and intimidating to patients and visitors

**Key Themes – Growth****Opportunities exist to increase volumes to the ED**

- Neurology and Orthopedics are potential service lines positioned for growth.
- Need to develop strategy that encourages suburban patients to come to this Emergency Department
- Opportunities to leverage relationships with EMS to growth higher acuity Emergency Department volumes
- Need to shift low-acuity patients and returns out of the Emergency Department and backfill with higher acuity volumes

ED Operations Review Summary Matrix – Main ED

	Clinical Quality & Outcomes	Fiscal Stewardship	Operational Efficiency	Physician & Staff Alignment	Service Excellence
Patient Arrival Experience	★ ★ ★	★ ★ ★	★ ★ ★	★ ★ ★	★ ★ ★
Triage and Initial Patient Intake	★ ★	★ ★ ★	★ ★ ★	★ ★ ★	★ ★ ★
Patient Registration	★ ★ ★	★	★ ★ ★	★ ★ ★	★ ★ ★
Patient Waiting Prior to Medical Screening	★	★ ★	★ ★	★ ★ ★	★ ★
Treatment Stations / Care Environment	★	★ ★	★ ★	★ ★	★
Clinical Diagnostics	★ ★	★ ★ ★	★	★ ★	★ ★
Admission Process	★	★	★	★ ★	★
Discharge Process	★ ★	★ ★	★ ★	★ ★ ★	★ ★ ★
ED-CPEP Interface	★ ★ ★	★ ★	★ ★	★ ★	★ ★ ★

**DESIGN COMPATABILITY FOR OPTIMIZED CLINICAL OPERATION**



Optimized to Provide Appropriate Care



Acceptable to Provide Appropriate Care



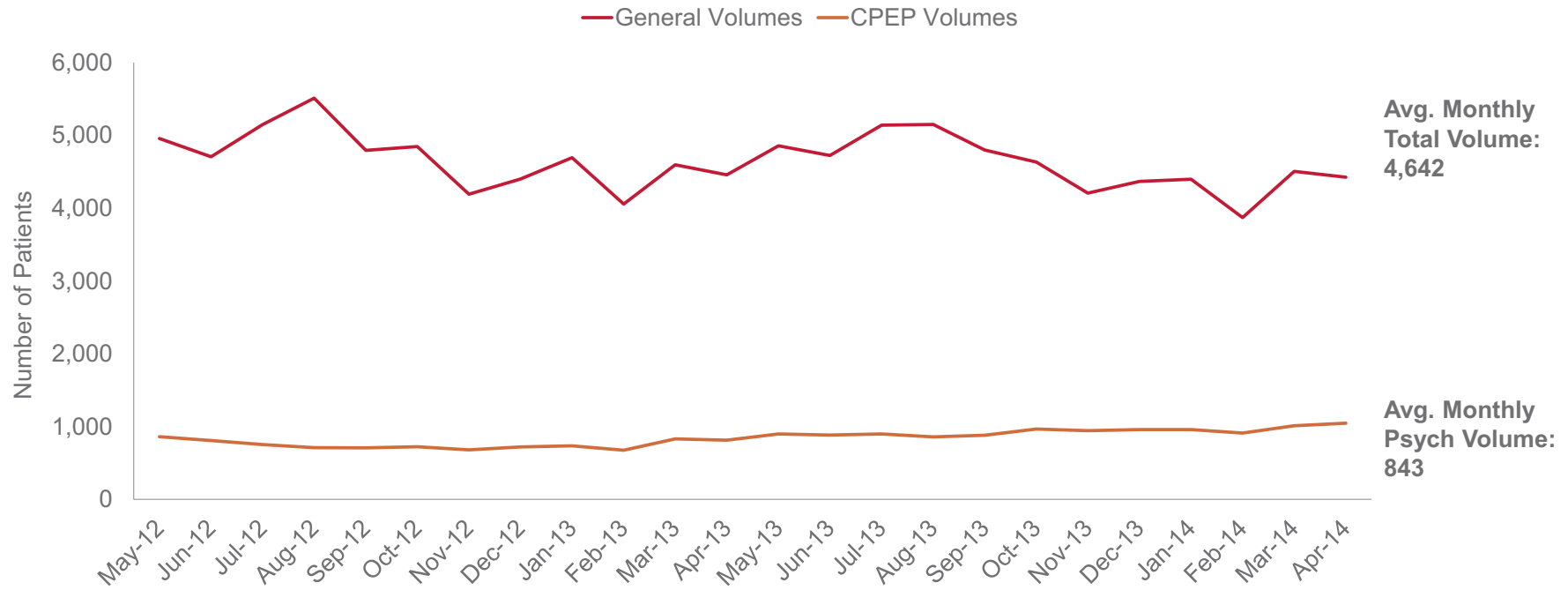
Modifications Recommended

***CURRENT STATE SUMMARY***  
**CURRENT STATE PRESENTATION**



**ED Volumes Have Been Relatively Stable with Expected Seasonal Variation**

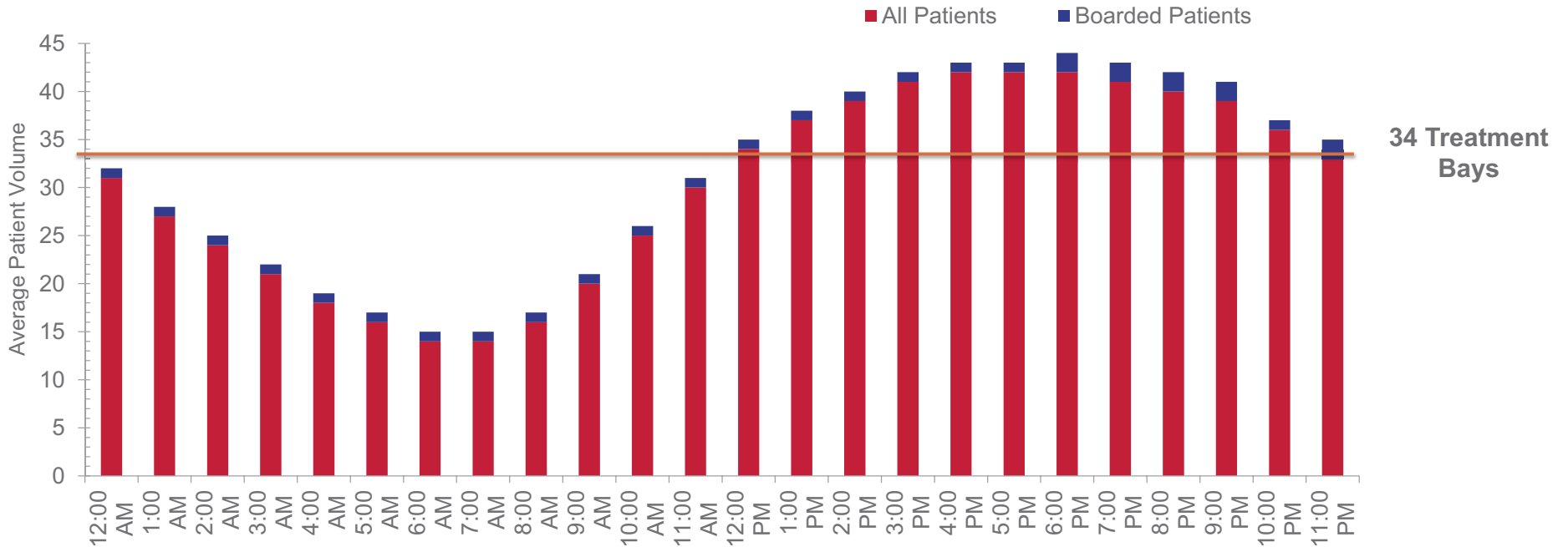
**Erie County Medical Center Emergency Department  
Volumes Analysis, All Patients  
May 2012- April 2014**



Sources: ECMC ED Departmental Level data; CannonDesign 2014.

**Patient Census Follow a Typical Arrival Pattern for Urban EDs;  
ED on Average Overcapacity 12 Hours Daily**

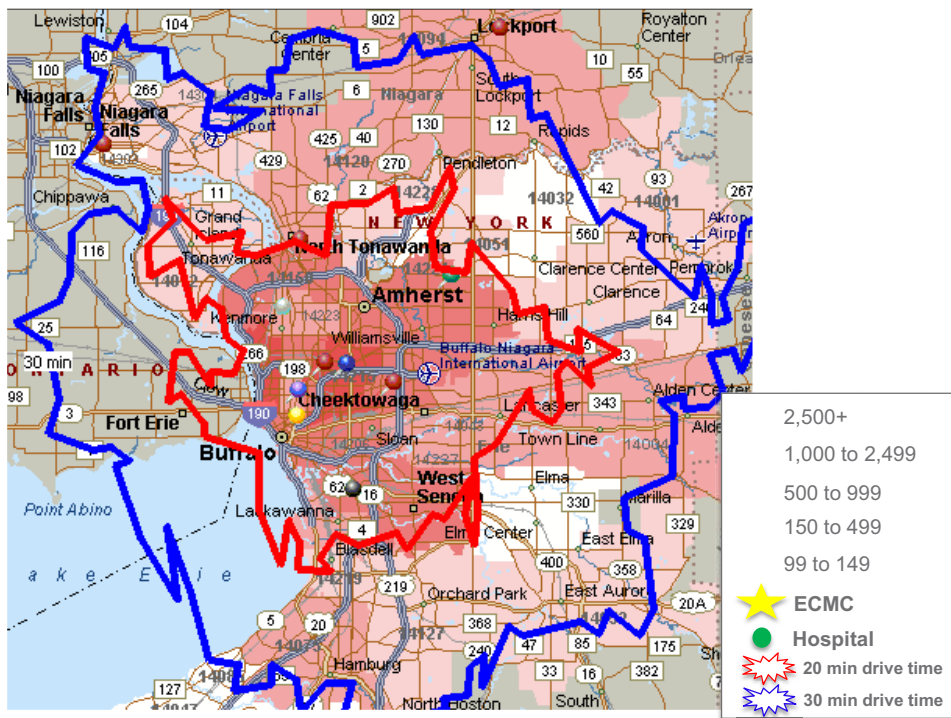
**Erie County Medical Center Emergency Department  
Average Patient Census, All Patients  
January – December 2013**



Note: Includes Pediatric Patients. Pediatric patients defined as Ages 0-18. Boarded patients defined as Admitted patients with time greater than 59 minutes from Decision to Admit (Bed Request) to Time Departing ED (Bed Assigned).  
Source: ECMC Patient Level data; CannonDesign Analysis 2014.

**81% of ED Cases Originate From 32 Zip Codes Located Within a 20 minute Drive of ECMC**

**ECMC Emergency Department Visits by Zip Code and Drive Time, 2013**

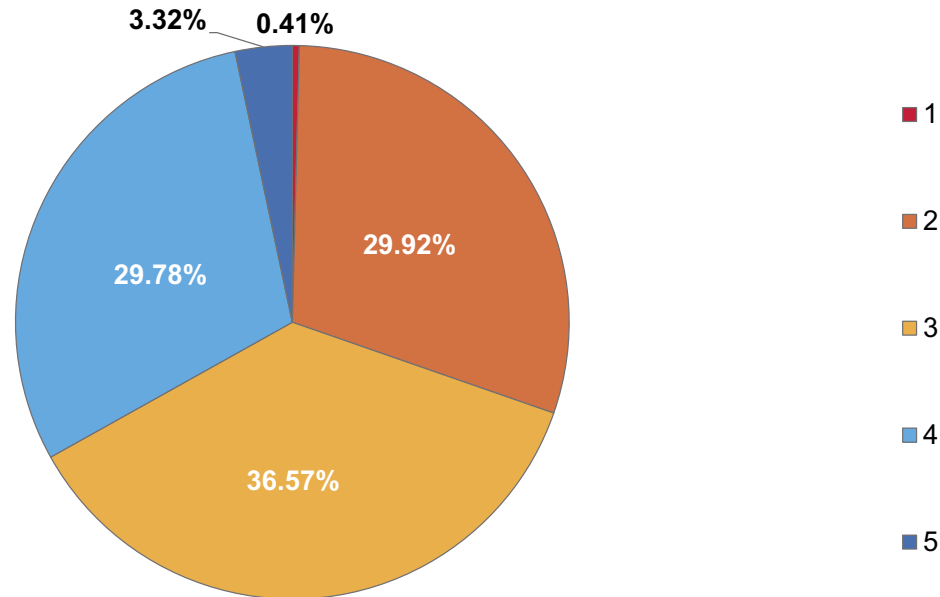


Service Area	ED Visits	% of Total
20 Minute Drive	53,367	81%
30 Minute Drive	6,516	10%
All Other	6,127	9%
<b>Total</b>	<b>66,010</b>	<b>100%</b>

\*Note: All Other represents patients from zip codes outside of a 30 minute drive time to ECMC (n = 5,640) and patients with a blank or erroneous zip code entry (n=487)  
 Sources: ECMC patient level data; CannonDesign Analysis, 2014

Over a quarter of ED visits are for moderately high-acuity patients.

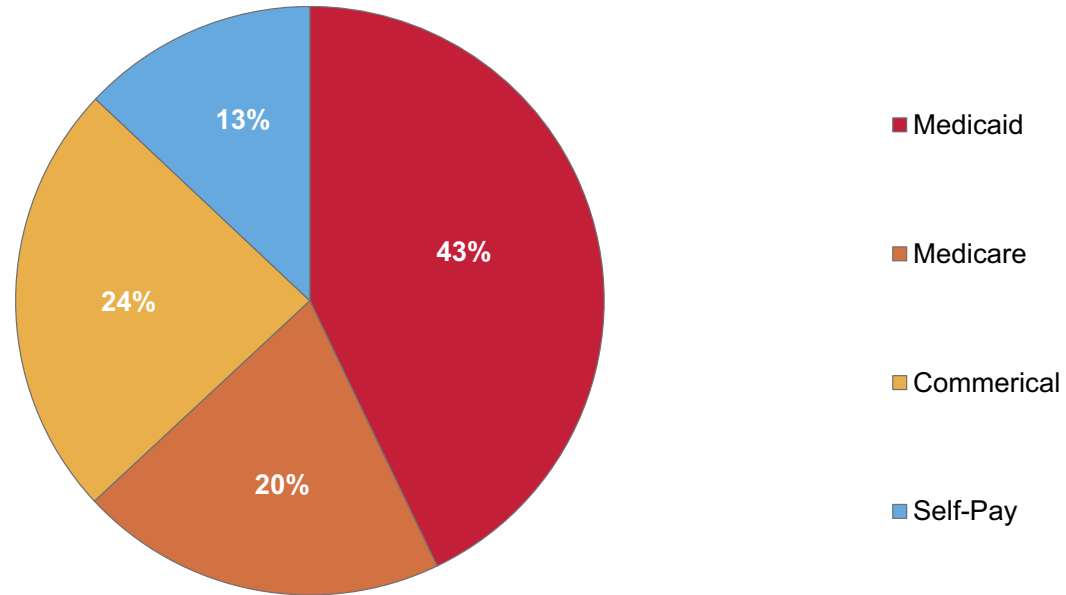
**Erie County Medical Center Emergency Department  
Adult Volume Analysis By ESI  
January - December 2013**



Note: ESI = Emergency Severity Index. Patients with the following discharge dispositions were excluded from analysis: LWOBS, LWOMR, LWOBT, LWOMS, AMA, DOA, and EXP. Main Patients with a blank ESI level were excluded n = 12 (0.2% of original volumes). N=59,539  
Sources: ECMC patient-level data; CannonDesign Analysis 2014.

**Public Payors and Self-Pay Account for 75% of 2013 ED Visits, Representing a Challenging Payor Mix at ECMC**

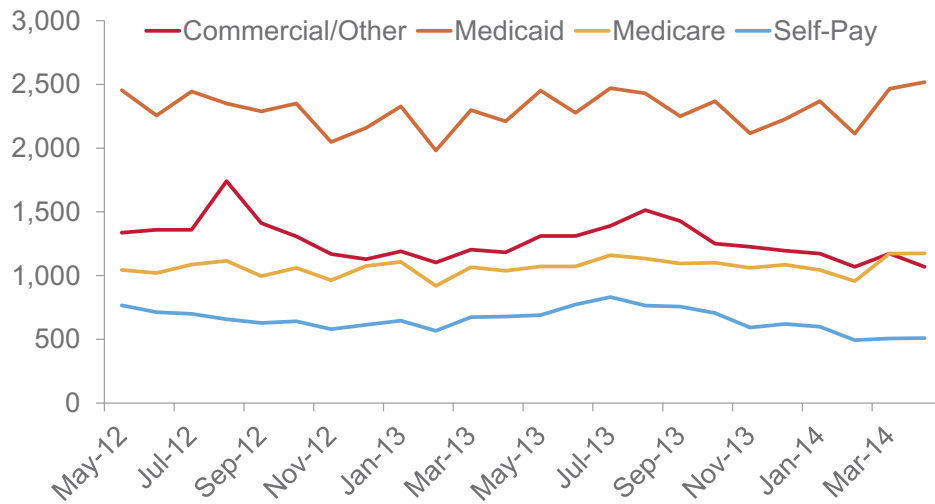
**Erie County Medical Center Emergency Department  
Volume Analysis By Payor, All Patients  
January – December 2013**



Note: ESI = Emergency Severity Index. Patients with the following discharge dispositions were excluded from analysis: LWOBS, LWOMR, LWOBT, LWOMS, AMA, DOA, and EXP. Main Patients with a blank ESI level were excluded n = 12 (0.2% of original volumes). N=59,539  
Sources: ECMC patient-level data; CannonDesign Analysis 2014.

# In General ED, Medicaid and Medicare Visits Increasing; Commercial and Self-Pay Volumes Decreasing

**Erie County Medical Center Emergency Department  
Volumes by Payor, All Patients  
May 2012 – April 2014**



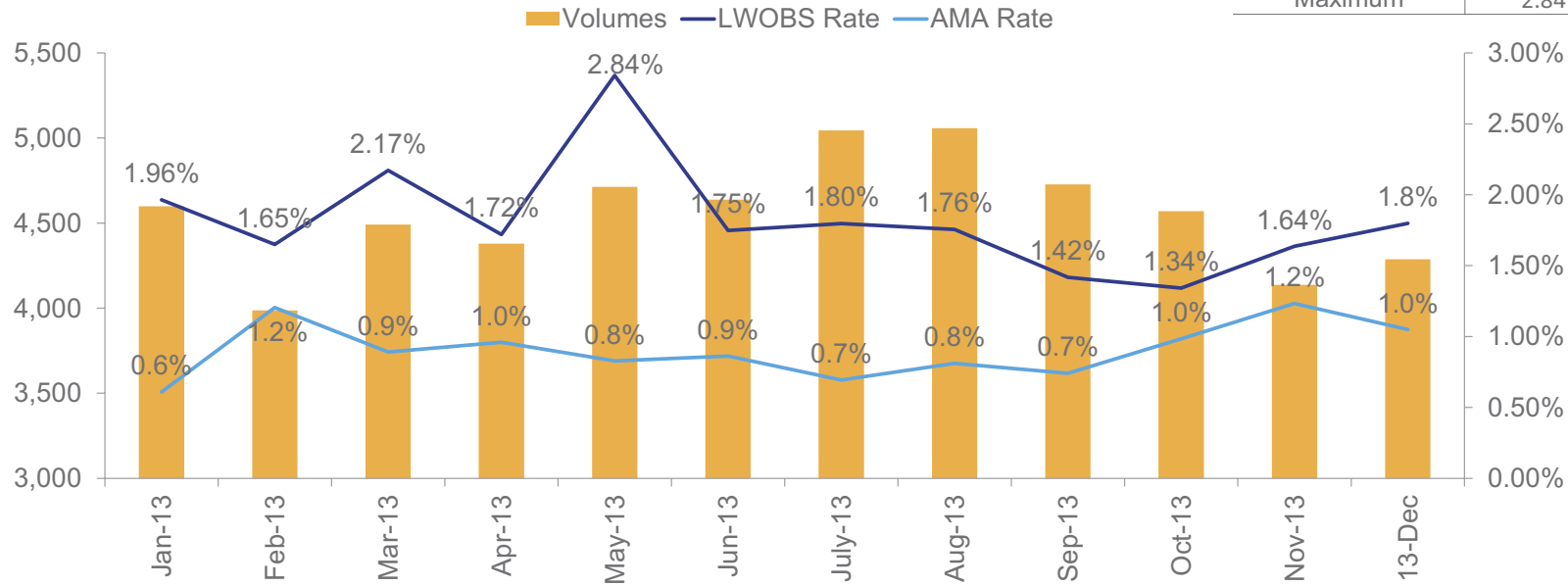
	January- December 2013 Avg. Monthly Visits
Commercial/ Other	1,275
Medicaid	2,284
Medicare	1,076
Self-Pay	692
<b>Grand Total</b>	<b>5,326</b>

Note: Excludes patients with dispositions : "DOA", "EXP", LWOBs", "LWOMS", LWOTR, LWOBt. Patients with blank Payor Class types excluded (N=3; Less than 1% of volumes). Medicare includes all patients assigned a financial class id of "Medicare FFS", "Medicare Managed Care", "Prisoners", "Medicare". Medicaid includes all patients with financial class of "Medicaid FFS", "Medicaid Managed Care", "Medicaid Pending". Commercial includes all patients with financial class of "HMO". Total N = 127,142  
Source: Erie County Medical Center Financial-level data; CannonDesign Analysis 2014

# There is Considerable Variability in Walk-Out Rates and No Correlation to Overall Monthly Volumes

**Erie County Medical Center Emergency Department  
Walkout Rates by Month  
January – December 2013**

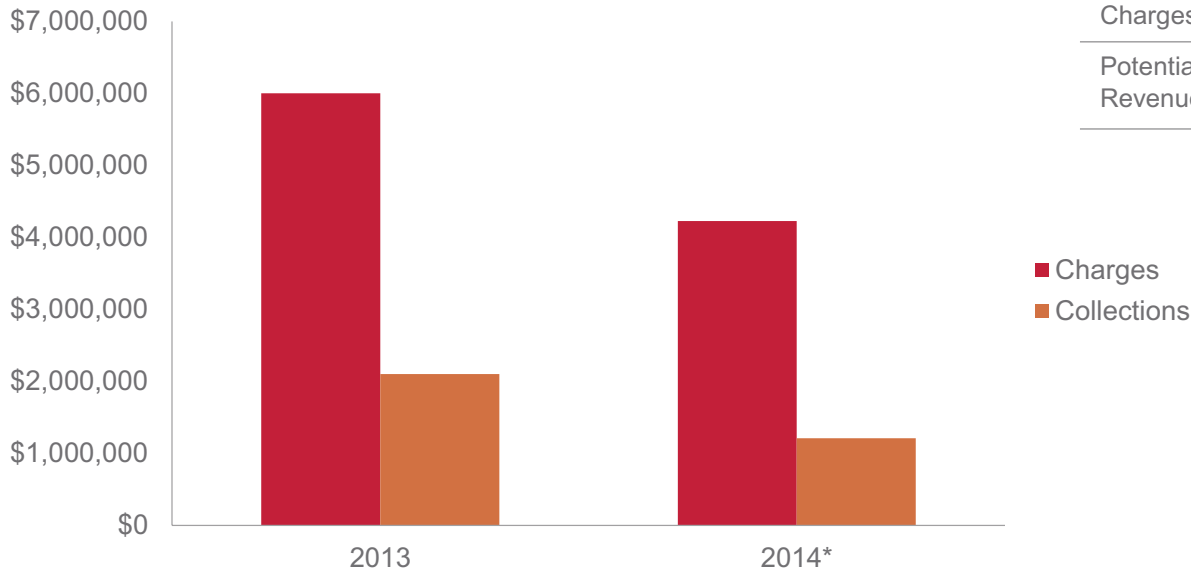
	LWOBS	AMA
Rate	2013	2013
Average	1.82%	0.91%
Minimum	1.34%	0.61%
Maximum	2.84%	1.23%



Note. LWOBS=Left without Being Seen. AMA = Against Medical Advice. Adult Patients defined as ages 19 years or older. Psych patients excluded from analysis.  
Sources: ECMC Patient Level Data, ECMC ED Department-Level Data; CannonDesign Analysis, 2014

# ECMC's Walk-Out Rate Has a Considerable Impact on the Hospital's Financial Performance

**Erie County Medical Center Emergency Department  
Potential Annual Hospital-wide Financial Impact – Walk-outs  
2013-2014\***



Category	2013	2014 YTD*
Potential Lost Charges	\$6,003,236	\$4,227,921
Potential Lost Revenue	\$2,101,270	\$1,209,431

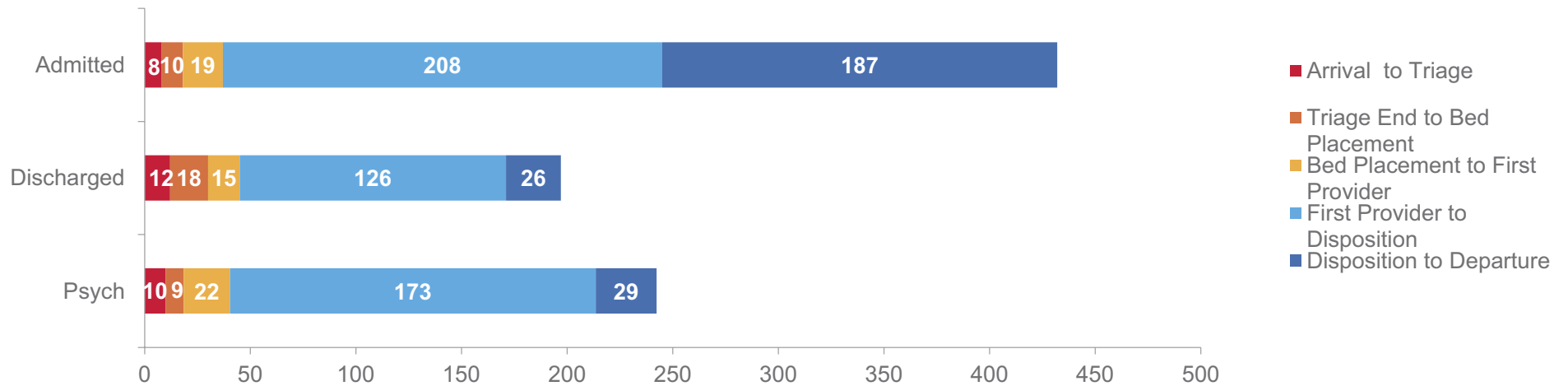
Note: \* 2014 Annualized based on Jan-April 2014 Walkouts and charges. Walkouts were defined as the following disposition classifications: "LWOBS", "LWOMS", LWOTR, LWOBT. Estimated charges reflect 2013 average of total hospital charges per ESI level compared with documented walkout patients in 2013 and 2014.  
Source: Erie County Medical Center Financial-level data; CannonDesign Analysis 2014



# Length of Stay for Admitted and Psychiatric Patients Exceed Recommended Benchmarks, Discharged Patients within Range

**Average Length of Stay by Disposition**  
**ECMC Emergency Department**  
**January 2013 – December 2013**

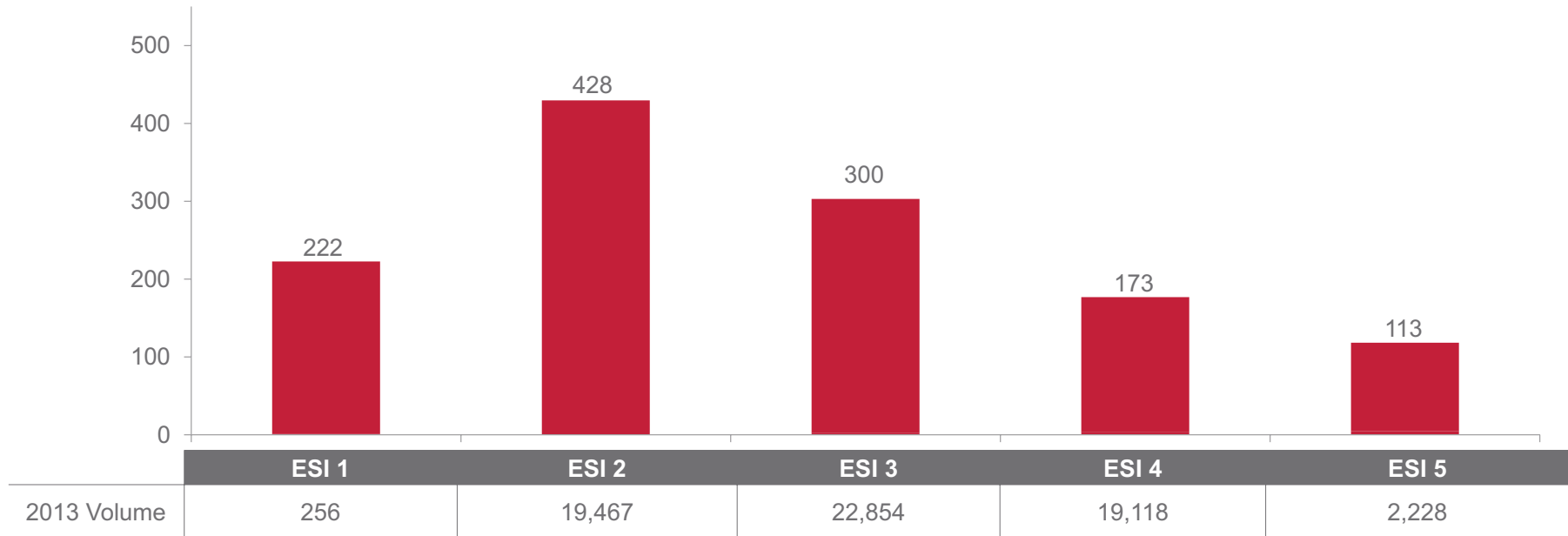
	Benchmark Comparison (minutes)							Yale Study	
	ECMC	Cannon	Premier				Mean	Median	
	Overall	Average	Min	Q'rtile	Average	Median	Max	Mean	Median
Door to Doc	44	20	14	37	62	56	170	52.4	34
Admit Dispo – ED Departure	187	60	38	61	116	138	200	-	-
Discharge ALOS	197	120	92	142	185	174	319	180	138
Admit ALOS	432	180	141	244	321	309	700	296	258



Note: Discharged Excludes Psych, Against Medical Advice and patients with the following dispositions, Left without being observed (LWOBE), LWOBT, LWOB, LWOMT, LWOMS, DOA, and EXP.  
 Sources: ECMC Patient Level Detail; CannonDesign Analysis, 2014.

**LOS of the Highest Acuity Patients by ESI Within Range of Best Practice**

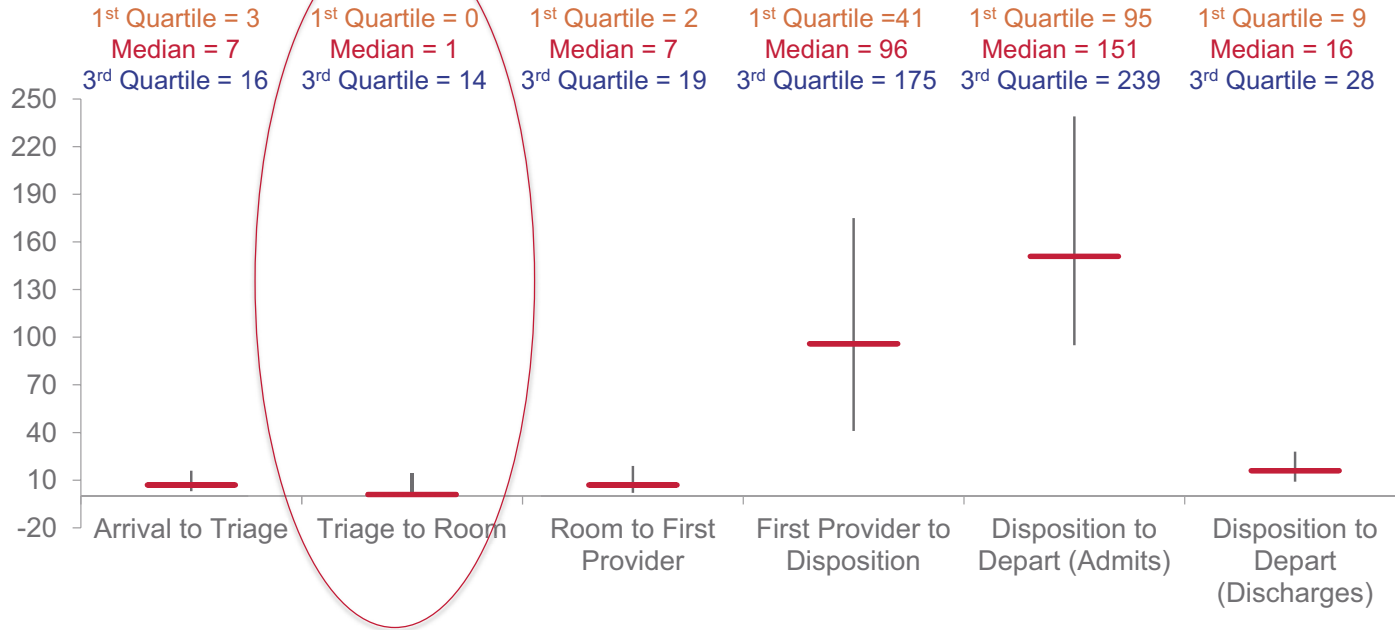
**Average Length of Stay by Emergency Severity Index  
Erie Medical Center Emergency Department  
January 2013 – December 2013**



Note:: Excludes patients with the following dispositions, Left without being observed (LWOBE), LWOBT, LWOBS, LWOMT,LWOMS, DOA, and EXP and blank patient types for Acuity (n=13)  
 . ALOS =Average Length of Stay. Total ALOS derived from length of stay information in ER Log ED and CPEP Data.. Total ALOS does not take into account sum of average of Time to First Provider, Doctor to Disposition or Disposition to Departure  
 Sources: ECMC patient level detail, ECMC ER Log CannonDesign Analysis, 2014.

# The ED Intake Process Works Rather Efficiently But the Throughput is Impacted by Diagnostic TATs and the Admission Process

## Erie County Medical Center Emergency Department Patient Throughput January – December 2013



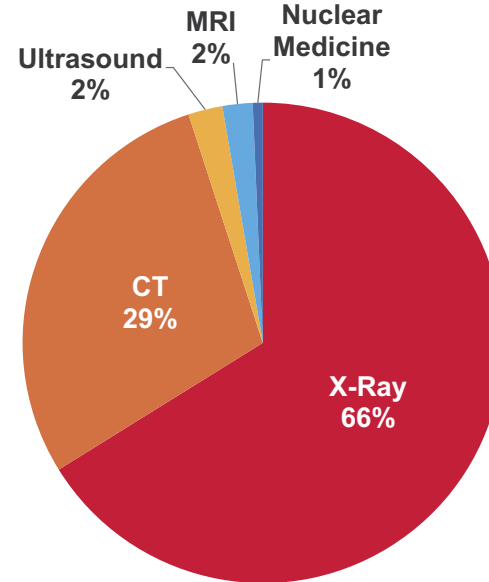
Total LOS	
Admits	
Q1	
Median	
Q3	
Q1	
Median	
Q3	
Median =	

Disposition to Depart = Total LOS – Time from Arrival to Disposition  
 For Triage to Room, Room to First Provider, and First Provider to Disposition all throughput times of less than 0 were assumed to be 0. For Disposition to Depart, all throughput times of less than 0 were omitted from the analysis. Arrival to Triage: Only ACMC-defined Walk-in patients included, and excludes patients with Disposition of Left Before Triage; Triage to Room. Excludes patients with Disposition of LWOBE, LWOMS, LWOBT, LWOMR. Discharges excludes all CPEP patients. CPEP patient defined by “CPEP” in ER Log.  
 Sources: Erie County Medical Center ED patient-level data; CannonDesign Analysis 2014.

**CT and X-ray Comprise Over 90% of all ED Imaging Orders**

**ED Imaging Orders  
Erie County Medical Center Emergency Department  
January - December 2013**

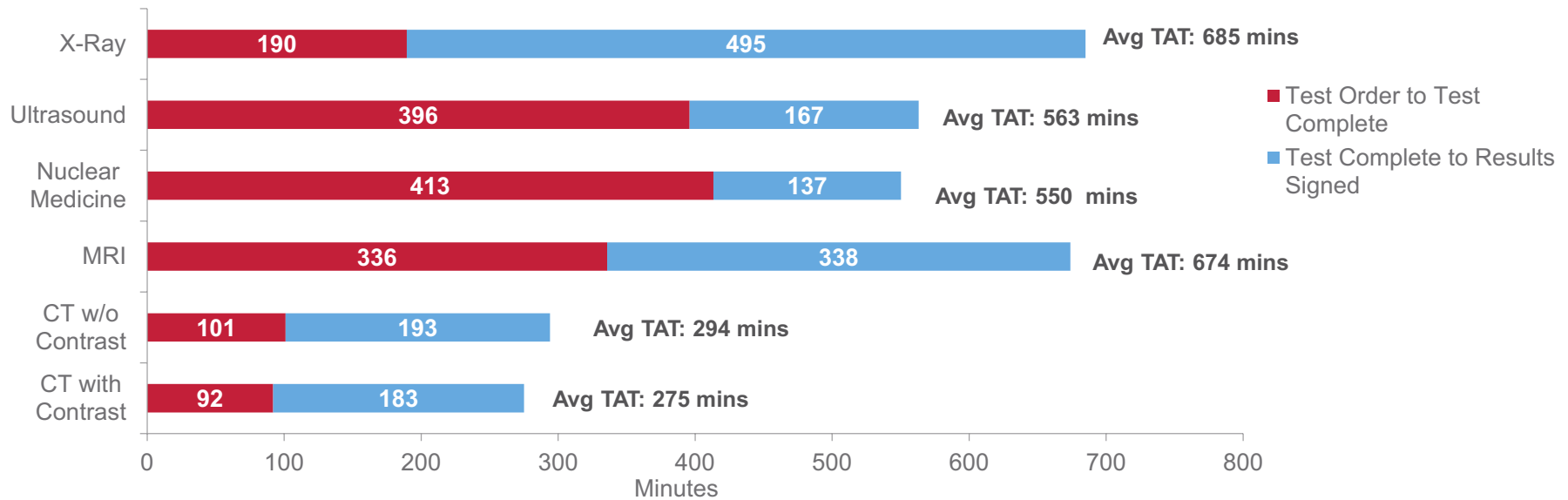
Imaging Modality	Volume
X-Ray	59,308
CT	25,850
Ultrasound	2,071
MRI	1,814
Nuclear Medicine	605
<b>Grand Total</b>	<b>89,648</b>



Note: CT includes Test Types "CT" and "CTA". MRI includes test types "MR", "MRA", "MRI". Excludes Test Types labeled "NULL", "LL", "R L", "R U" (N=4), Total N = 89,652  
Sources: ECMC ED Radiology Procedural Level Data; CannonDesign Analysis, 2014

# TAT Variability Exists Across Imaging Modalities with MRI Having the Greatest Impact on Individual Patient Throughput in the ED

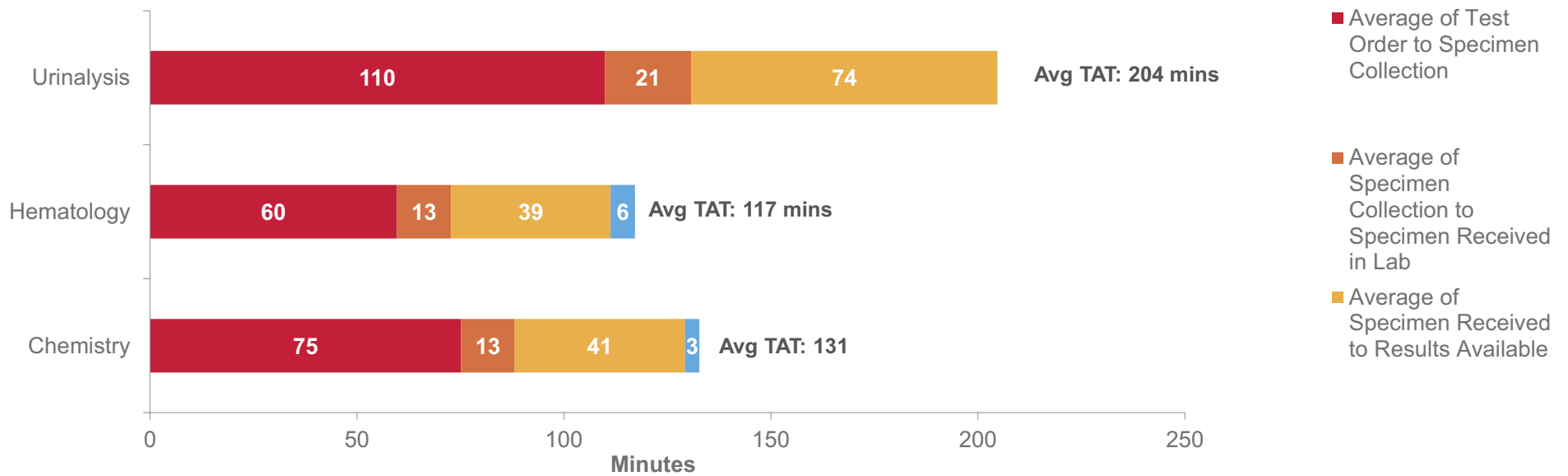
**ED Average Imaging Turnaround Times**  
**Erie County Medical Center Emergency Department**  
**January– December 2013**



Note: CT includes Test Types “CT” and “CTA”. MRI includes test types “MR”, “MRA”, “MRI”. Excludes Test Types labeled “NULL”, “LL”, “R L”, “R U” (N=4), and Test Results with “NULL” (N=79). Excludes Tests with Test Order to Complete over 24 hours. Sources: ECMC ED Radiology Procedural Level Data; CannonDesign Analysis, 2014

# Getting Specimens to the Lab Represents ½ of the Time Spent in the Clinical Lab Process

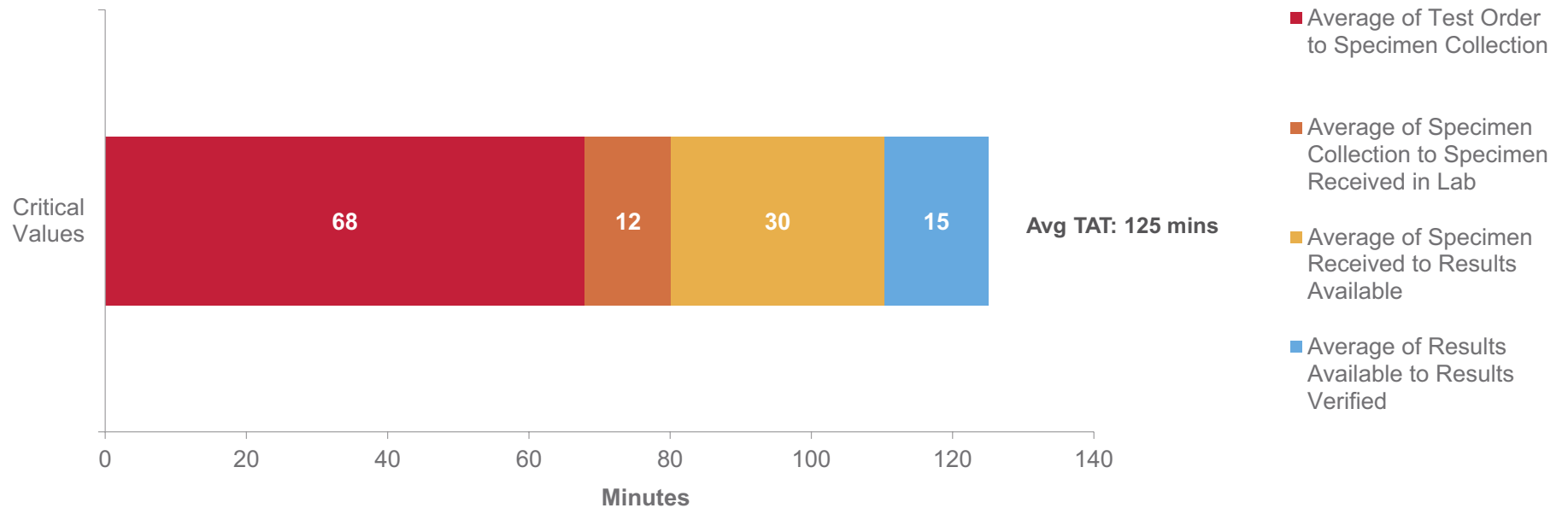
**ED Average Lab Process Times**  
**Erie County Medical Center Emergency Department**  
**January – December 2013**



Note: Tests with TAT > 24 hrs and blank for Lab type excluded from analysis. Excludes tests where test order date differed from specimen collection times.  
 Sources: ECMC ED Laboratory Procedural Level Data; CannonDesign Analysis, 2014

**On Average, Results Available to Results Verified for Critical Values is 15 Minutes**

**ED Average Lab Process Times , Critical Values  
Erie County Medical Center Emergency Department  
January – December 2013**



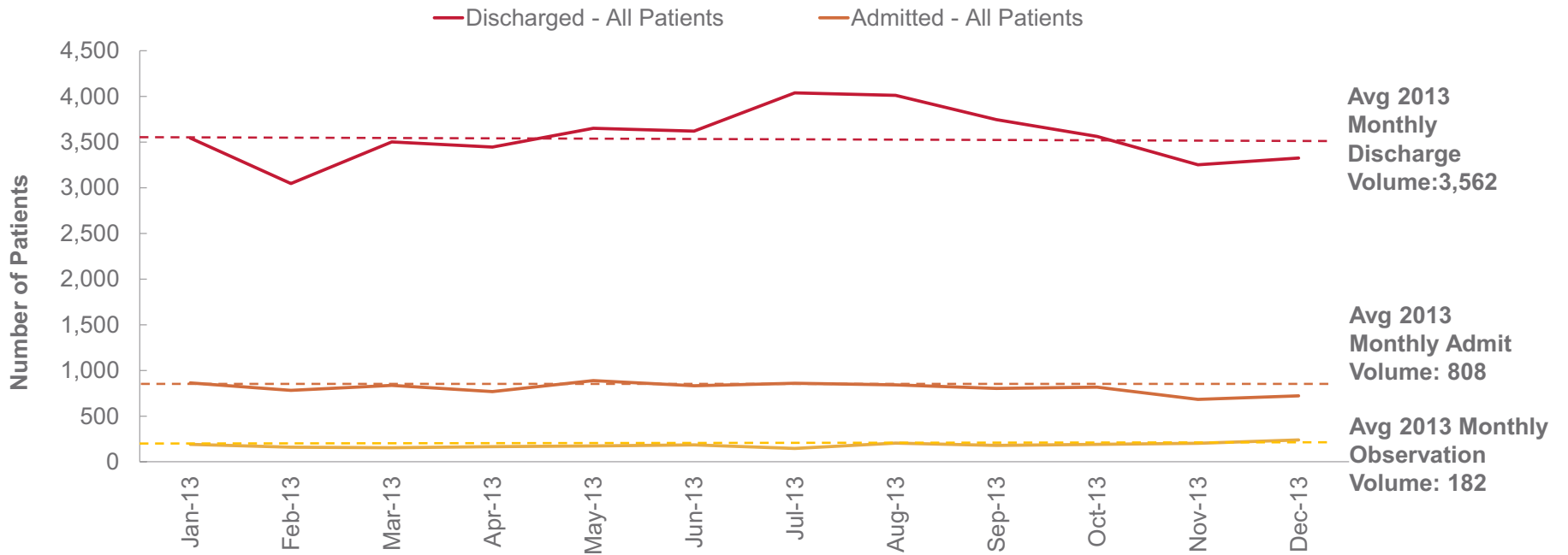
Tests with TAT > 24 hrs and blank for Lab type excluded from analysis. Excludes tests where test order date differed from specimen collection times. Critical Value defined as "Yes" for Critical Value Log.

Sources: ECMC ED Laboratory Procedural Level Data; CannonDesign Analysis, 2014

# 18% of ED Visits in 2013 Resulted in Inpatient Admission, Rates of Observation are Lower Than Expected

**Erie County Medical Center Emergency Department  
Volumes Analysis, All Patients  
January - December 2013**

2013	Admitted	Discharged	Obs
Adults	18%	78%	4%

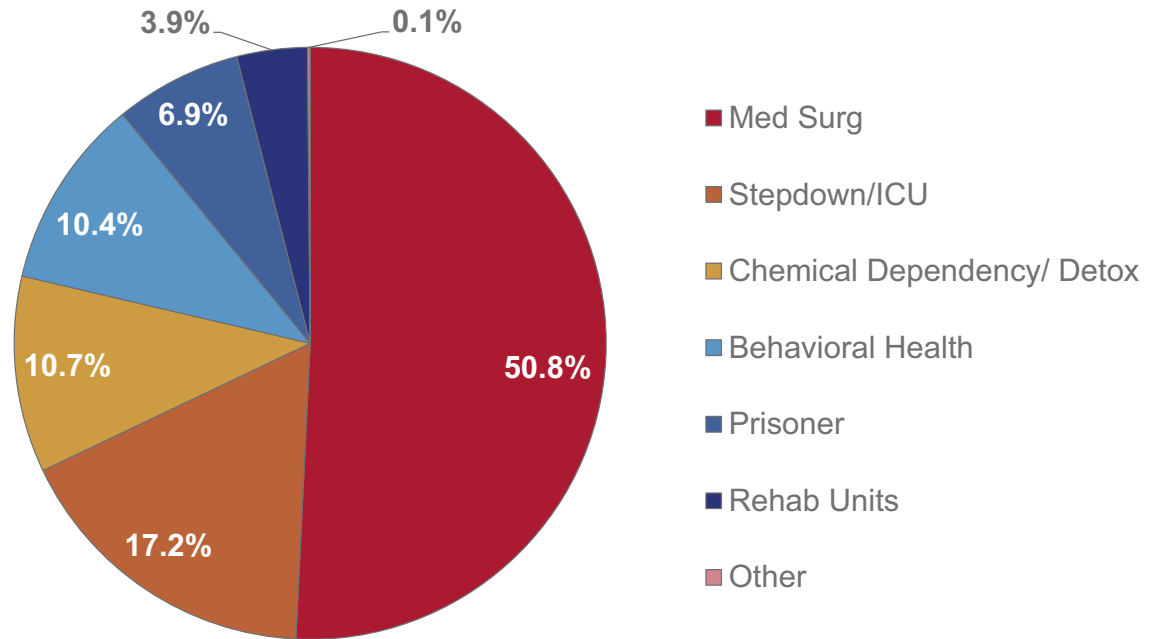


Excludes All Psych Patients, Left Without Being Seen Patients  
Sources: ECMC ED Departmental Level data; CannonDesign 2014.



**Med / Surg Admission Accounts for 51% of All ED Admits**

**Erie County Medical Center Emergency Department  
Adult Admitted Patient Volume  
January - December 2013**

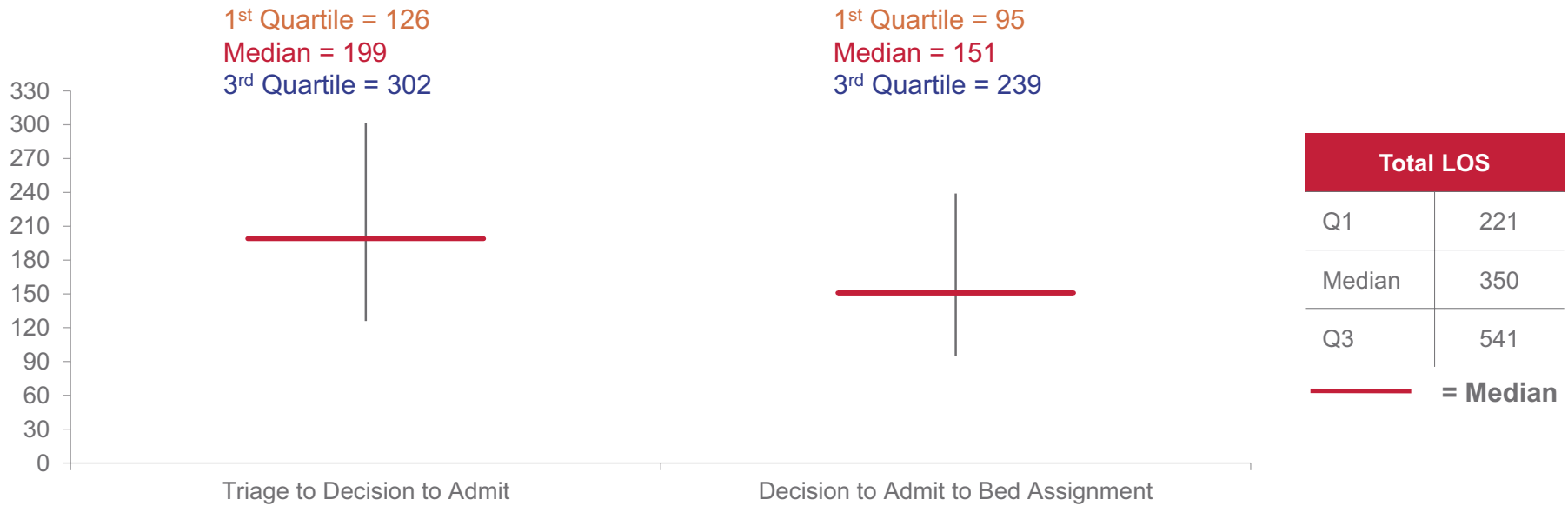


Note: Adult patients defined as patients ages 19 and above. All admitted patients included in analysis. Admitted patients identified by admitting room location. Other includes patients with "Blank" Inpatient Unit Type . Excludes Patients labeled LWOBS, LWOMR, LWOB, LWOMS, AMA, DOA, and EXP. T

Source: ECMC Patient Level Data; CannonDesign Analysis 2014

**25% of Admitted Patients Spend More than 4 Hours in the Admission Process, Fewer than 10% Are Admitted Within 1 Hour**

**Erie County Medical Center Emergency Department  
Admitted Patients  
January – December 2013**

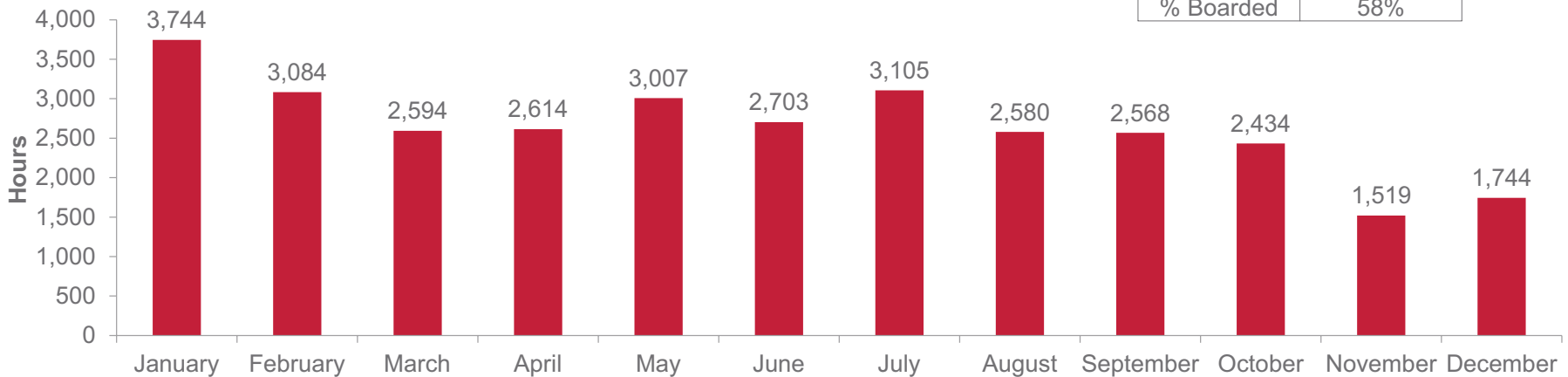


Throughput times of < 0 omitted from the analysis, patients missing bed assignment time ; bed assignment time stamps occurring before discharge time stamp.  
Sources: ECMC ED patient-level data; CannonDesign Analysis 2014

**In 2013, Over 8,200 ED Admits Boarded in the ED, Decreasing ED Treatment Bay Capacity by 6 Treatment Stations**

**Erie County Medical Center Emergency Department  
Adult Admitted Patient Boarding<sup>1</sup>  
January – December 2013**

	<b>2013</b>
Boarded	8,222
Admitted	14,062
% Boarded	58%



	January	February	March	April	May	June	July	August	September	October	November	December
<b>Boarded</b>	767	676	741	656	772	727	717	714	696	671	525	560
<b>Admitted</b>	1,205	1,072	1,168	1,080	1,214	1,175	1,182	1,228	1,191	1,252	1,095	1,200
<b>ED Visits</b>	5,428	4,731	5,425	5,270	5,753	5,604	6,037	6,009	5,678	5,600	5,150	5,325

Note: AMA and LWOBS, and Pediatric Patients. Pediatric Patients' defined as Ages 18 or younger. <sup>1</sup>Admitted patients with time greater than 59 minutes from Decision to Admit to Time Departing ED.

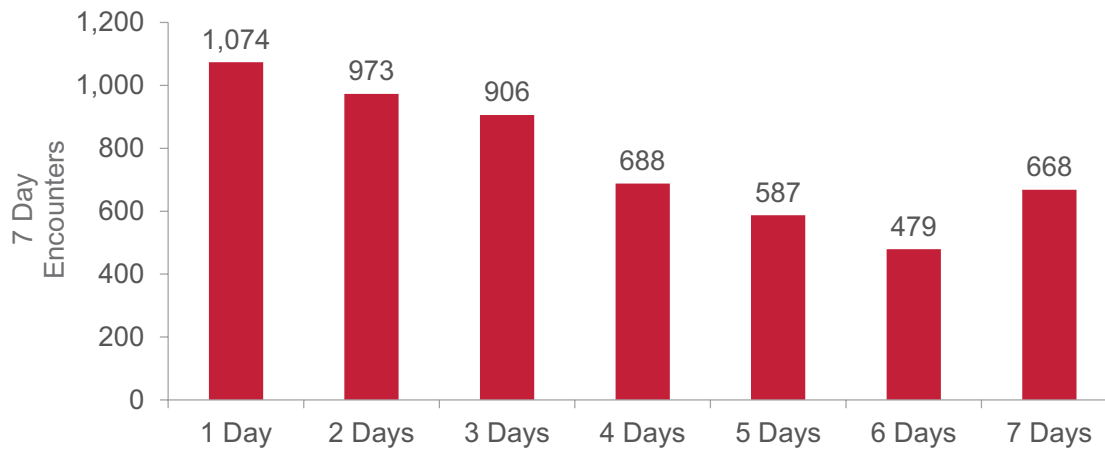
Sources: ECMC patient level data; CannonDesign Analysis, 2014.

**Inpatient Boarding in the ED Requires 5.1 RN FTEs Annually**

	<b>2013</b>
Total Boarding Hours - 2013	31,695
Annual Patient Care Hours per Nursing FTE	6,240
RN FTEs Required to Support Inpatient Boarding	5.1 FTEs

# 7-Day Return Encounters Accounted for 10% of ED Volumes in 2013

**Erie County Medical Center Emergency Department  
7 Day Encounters and Readmissions<sup>1</sup>, Adults only  
January – December 2013**



	1 Day	2 Days	3 Days	4 Days	5 Days	6 Days	7 Days
<b>7 Day Return Encounters Admitted to IP Unit</b>	248	196	134	98	118	106	114
<b>% of 7 Day Encounters Admitted to IP Unit</b>	23%	20%	15%	14%	20%	22%	17%

	Volumes
7-Day Return Encounters	5,375
<b>Treatment Station Demand</b>	<b>4</b>
2013 ED Visits	66,010
% of Encounters Returning to ED within 7 Days	8%
7 Day Return Encounters Admitted to IP Unit	1,014
% of 7-Day Return Encounters Admitted to IP Unit	19%

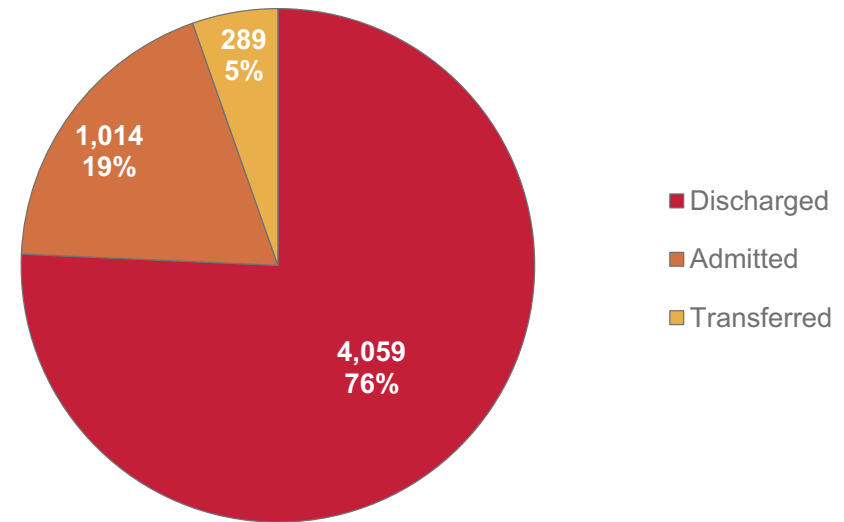
Note: <sup>1</sup>Readmission defined as an admit by a patient made within 7 days or less of their prior encounter. Duration between ED arrival and prior departure is rounded to nearest whole day. Return visits within <0.5 days were excluded from the return and readmission counts (N=332,6% of volumes). 7-Day analysis excludes Patients with disposition "Left without being Examined", "Against Medical Advice", "Dead on Arrival", "Expired" and Psych. Excludes Pediatric Patients. Pediatric patients defined as Ages 18 or younger. 2013 ED Visits volume include Adults only; excludes Dispositions "DOA", and Psych Patients. Sources: ECMC ED patient-level data; CannonDesign Analysis, 2014. Total Patients N=5,375

## 7-Day Return to ED Encounter Suggest Need for Alternative Ambulatory Options / Population Health Strategies

**Erie County Medical Center Emergency Department  
7-Day Return Encounters Top Diagnosis by Volume  
January – December 2013**

Diagnosis	Number of Visits
Vaccine For Rabies	443
Alcohol Abuse unspecified	260
Abdominal Pain	192
Chest Pain	177
Drug Withdrawal	131
Suture Removal	119
Other Acute Pain	103
Alcohol Withdrawal	98
Pain In Limb	98
<b>Total</b>	<b>1,619</b>

**Erie County Medical Center Emergency Department  
7-Day Return Encounters by Disposition  
January – December 2013**

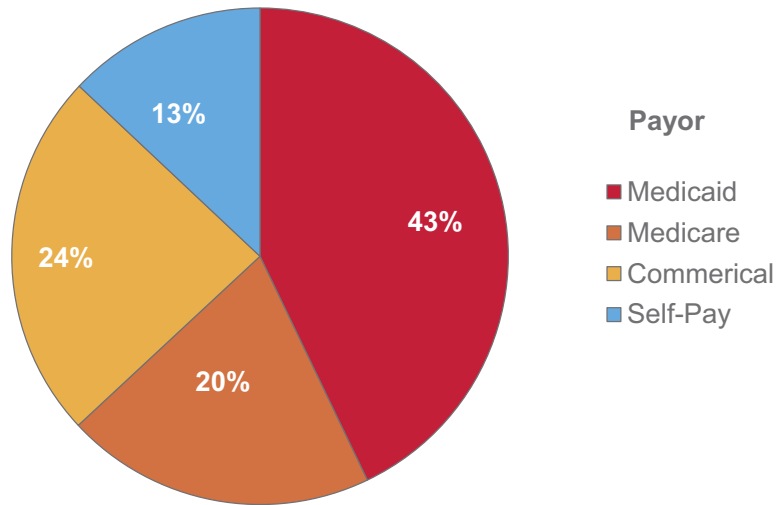


Note: <sup>1</sup>Readmission defined as an admit by a patient made within 7 days or less of their prior encounter. Duration between ED arrival and prior departure is rounded to nearest whole day. Return visits within <0.5 days were excluded from the return and readmission counts (N=332,6% of volumes). Patients with “blank”, “ACLC” or “PRO” disposition types excluded (N=13) 7-Day analysis excludes Patients with disposition “Left without being Examined”, “Against Medical Advice”, “Dead on Arrival”, “Expired” and Psych.

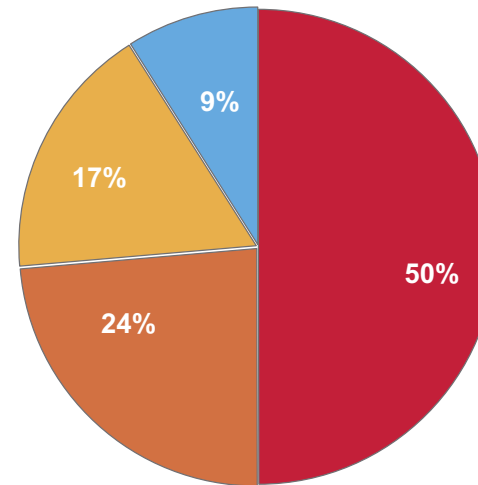
Sources: ECMC ED patient-level data; CannonDesign Analysis, 2014.

## 7-Day Return Encounters Comprised Mainly of Medicare and Medicaid Patients

**Erie County Medical Center Emergency Department  
Payor Mix, All Patients  
January – December 2013**



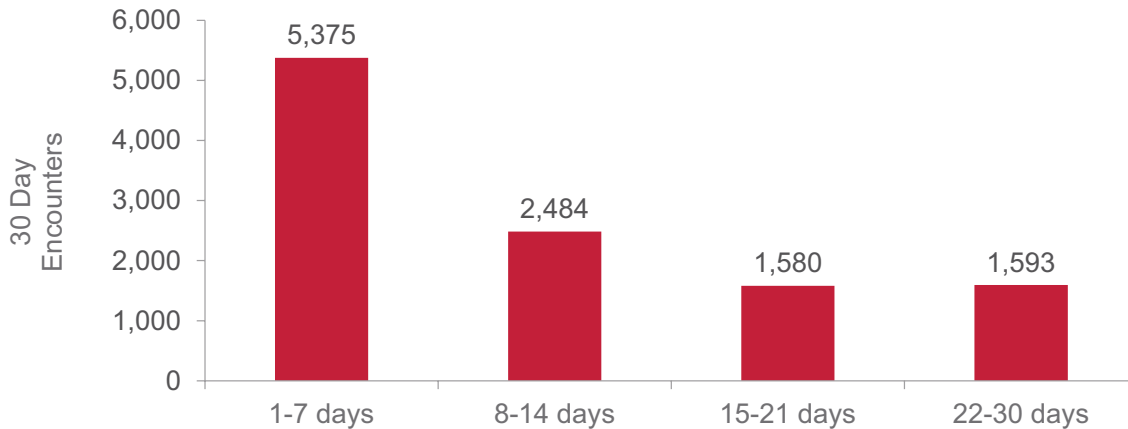
**Erie County Medical Center Emergency Department  
Payor Mix, All 7-Day Return Encounters by Disposition  
January – December 2013**



Notes: "DOA", "EXP", LWOBS, "LWOMS", LWOTR, LWOBT. Patients with blank Payor Class types excluded (N=2; Less than 1% of volumes). Medicare includes all patients assigned a financial class id of "Medicare FFS", "Medicare Managed Care", "Medicare". Medicaid includes all patients with financial class of "Medicaid FFS", "Medicaid Managed Care", "Medicaid Pending", "Prisoners", or "Correctional Facility". Commercial includes all patients with financial class of "HMO". Source: Erie County Medical Center Financial-level data; CannonDesign Analysis 2014

**17% of Patients Return to the ED within 30 Days, Mostly Commonly for Alcohol-Related Issues, Using Nearly 20% of Current ED Beds**

**Erie County Medical Center Emergency Department  
30 Day Encounters and Readmissions<sup>1</sup>, Adults only  
January – December 2013**



	Volumes
30-Day Return Encounters	11,302
<b>Treatment Station Demand</b>	<b>8</b>
2013 ED Visits*	66,010
% of Encounters Returning to ED within 30 Days	17%
30 Day Return Encounters Admitted to IP Unit	2,370
% of 30-Day Return Encounters Admitted to IP Unit	21%

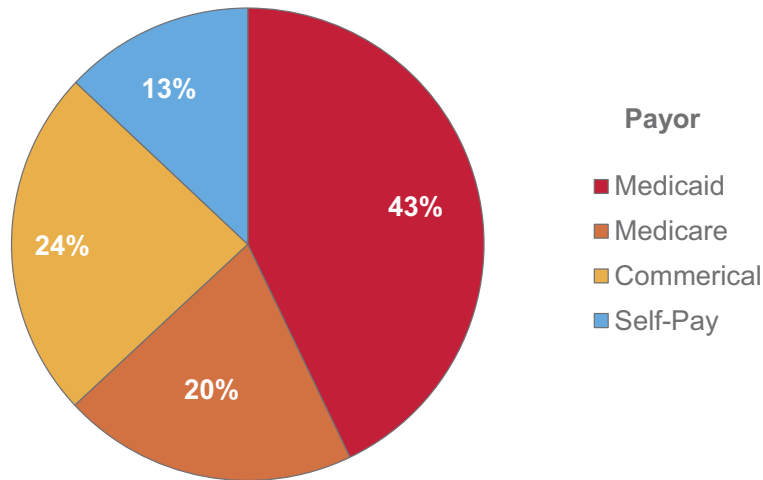
	1-7 days	8-14 days	15-21 days	22-30 days
<b>30 Day Return Encounters Admitted to IP Unit</b>	1,014	544	415	397
<b>% of 30 Day Encounters Admitted to IP Unit</b>	19%	22%	26%	25%
<b>Top Diagnosis of Admitted Encounters (Number of Admits)</b>	Alcohol Withdrawal (78)	Alcohol Withdrawal (40)	Chest Pain NEC(24)	Alcohol Withdrawal (27)

Note: <sup>1</sup>Readmission defined as an admit by a patient made within 7 days or less of their prior encounter. Duration between ED arrival and prior departure is rounded to nearest whole day. Return visits within <0.5 days were excluded from the return and readmission counts (N=332,3% of volumes). 7-Day analysis excludes Patients with disposition "Left without being Examined", "Against Medical Advice", "Dead on Arrival", "Expired" and Psych. Excludes Pediatric Patients. Pediatric patients defined as Ages 18 or younger. 2013 ED Visits volume include Adults only; excludes Dispositions "DOA", and Psych Patients. Sources: ECMC ED patient-level data; CannonDesign Analysis, 2014.Total Patients N=11,302

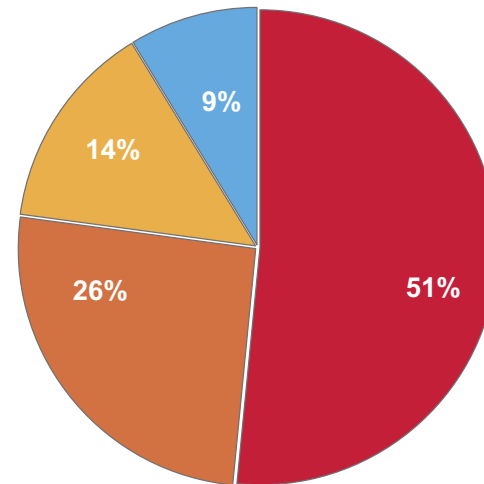


**Similar to 7-Day Return Visits, 30-Day Return Visits Heavily Favor Public Payors**

**Erie County Medical Center Emergency Department  
Payor Mix, All Patients  
January – December 2013**



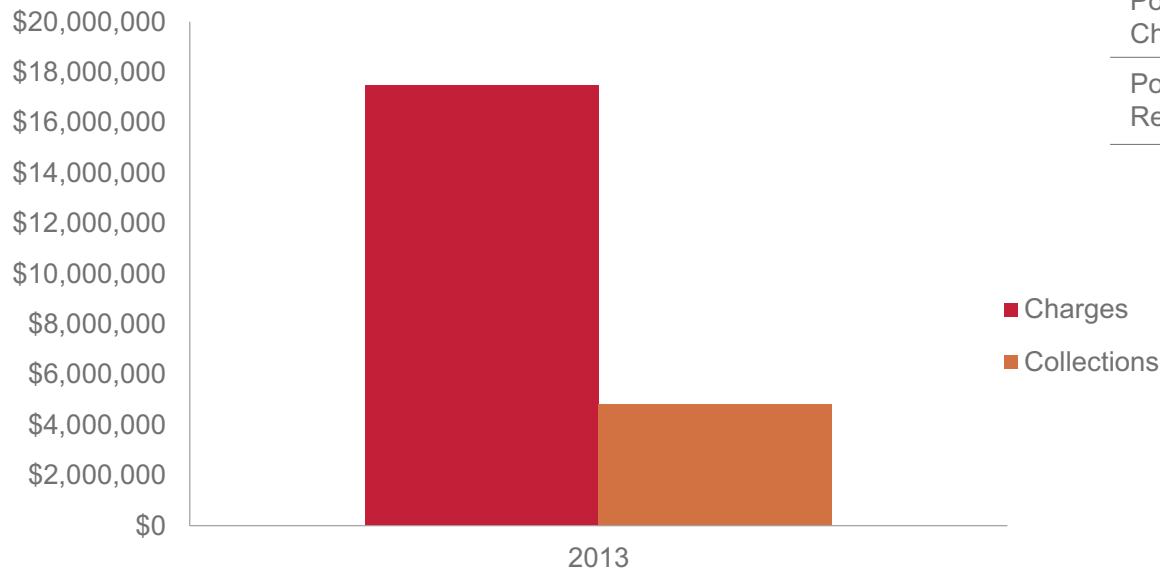
**Erie County Medical Center Emergency Department  
Payor Mix, All 30-Day Return Encounters  
January – December 2013**



Notes: "DOA", "EXP", LWOB, "LWOMS", LWOTR, LWOB. Patients with blank Payor Class types excluded (N=4; Less than 1% of volumes). Medicare includes all patients assigned a financial class id of "Medicare FFS", "Medicare Managed Care", "Medicare". Medicaid includes all patients with financial class of "Medicaid FFS", "Medicaid Managed Care", "Medicaid Pending", "Prisoners", or "Correctional Facility". Commercial includes all patients with financial class of "HMO". Source: Erie County Medical Center Financial-level data; CannonDesign Analysis 2014

# Eliminating 30-Day Return Visits Entirely Would Reduce Overall ED Revenue by Nearly \$5 Million

**Erie County Medical Center Emergency Department  
30 – Day Return Encounters Financial Impact 2013**



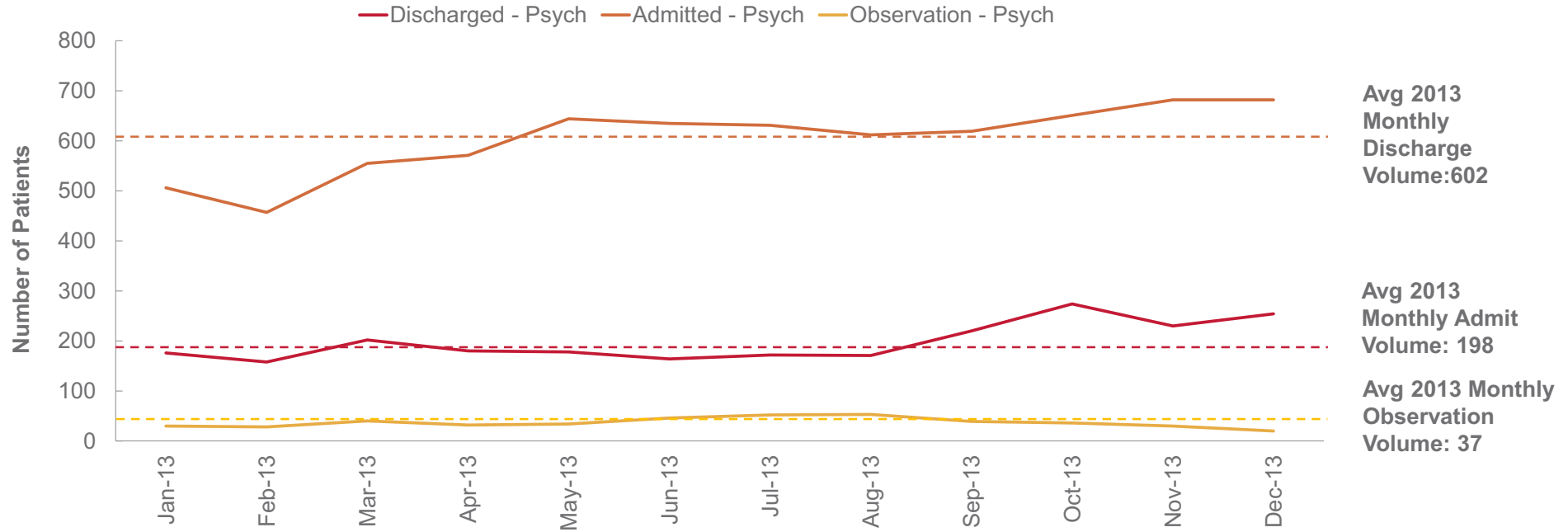
Category	2013
Potential Lost Charges	\$17,488,012
Potential Lost Revenue	\$4,820,087

Note: \* 2014 Annualized based on Jan-April 2014 Walkouts and charges. Walkouts were defined as the following disposition classifications: "LWOBS", "LWOMS", LWOTR, LWOBT. Estimated charges reflect 2013 average of total hospital charges per ESI level compared with documented walkout patients in 2013 and 2014. Source: Erie County Medical Center Financial-level data; CannonDesign Analysis 2014

**CPEP Total Visits and Inpatient Admission Rates are Trending Up**

**Erie County Medical Center Emergency Department  
Volumes Analysis, CPEP  
January – December 2013**

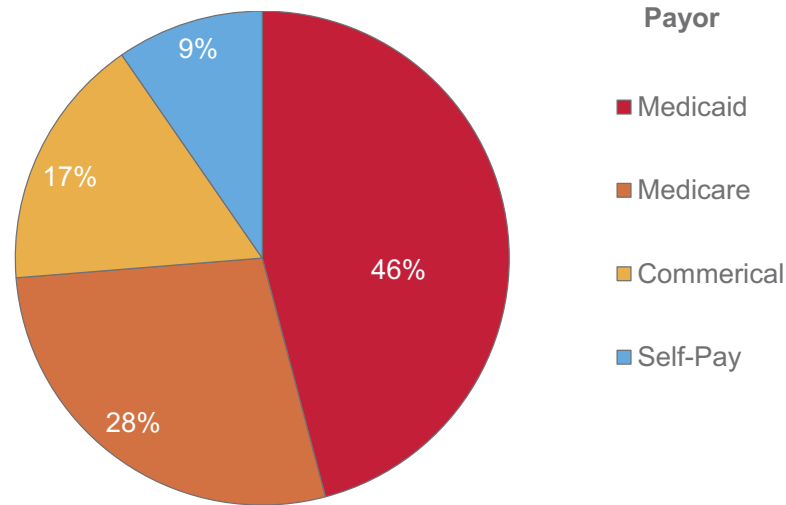
2013	Admitted	Discharged	Observation
Adults	24%	72%	4%



Excludes All non-behavior health patients. Behavior health patients defined with "CPEP", "CPEPFT", or admission to a behavior health inpatient unit.  
Sources: ECMC ED Departmental Level data; CannonDesign 2014.

**The Majority of CPEP Patients are Medicaid and Medicare Accounting for 74% of Payors**

**Erie County Medical Center CPEP  
Volume Analysis By Payor  
January – December 2013**



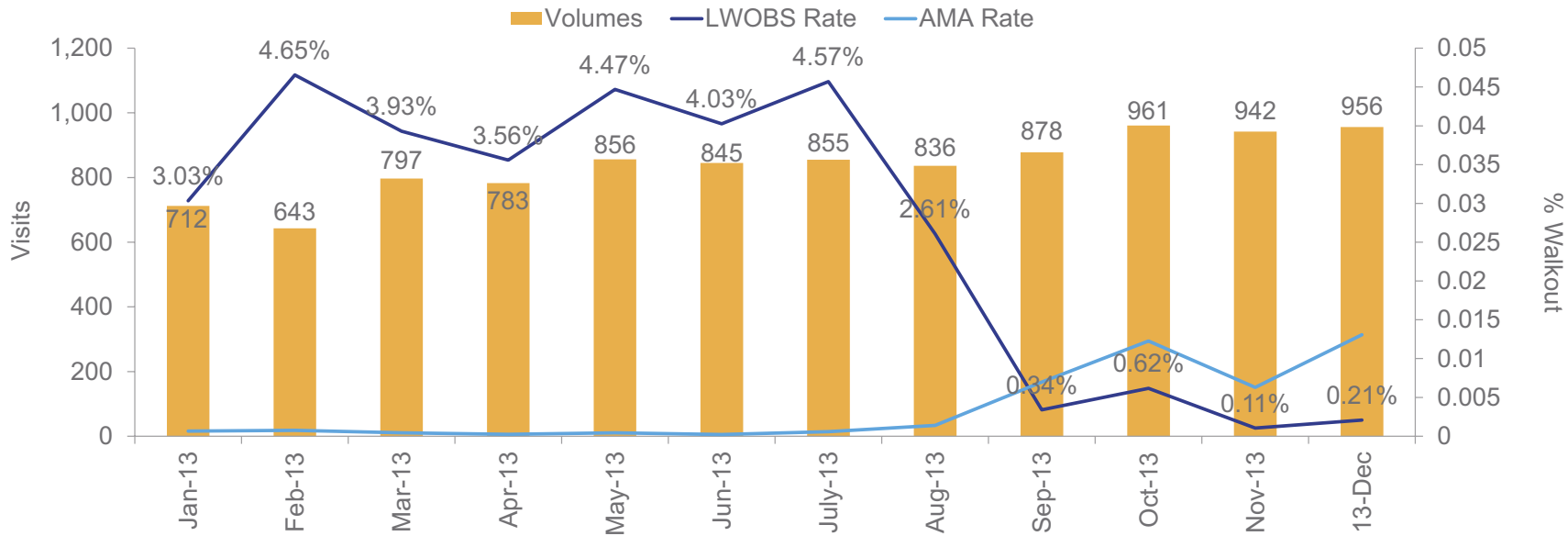
Note: Excludes All non-behavior health patients. Behavior health patients defined with “CPEP”, “CPEPFT”, or admission to a behavior health inpatient unit and patients with dispositions : “DOA”, “EXP”, LWOBS”, “LWOMS”, LWOTR, LWOBT. Medicare includes all patients assigned a financial class id of “Medicare FFS”, “Medicare Managed Care”, “Prisoners”, “Medicare”. Medicaid includes all patients with financial class of “Medicaid FFS”, “Medicaid Managed Care”, “Medicaid Pending” . Commercial includes all patients with financial class of “HMO”. Adult Total N=9,671

Source: Erie County Medical Center Financial-level data; CannonDesign Analysis 2014

## Substantial Decreases in CPEP Walk-Out Rates Were Seen with the Opening of the New Unit

**Erie County Medical Center Emergency Department  
CPEP Walkout Rates by Month  
January 2013 – December 2013**

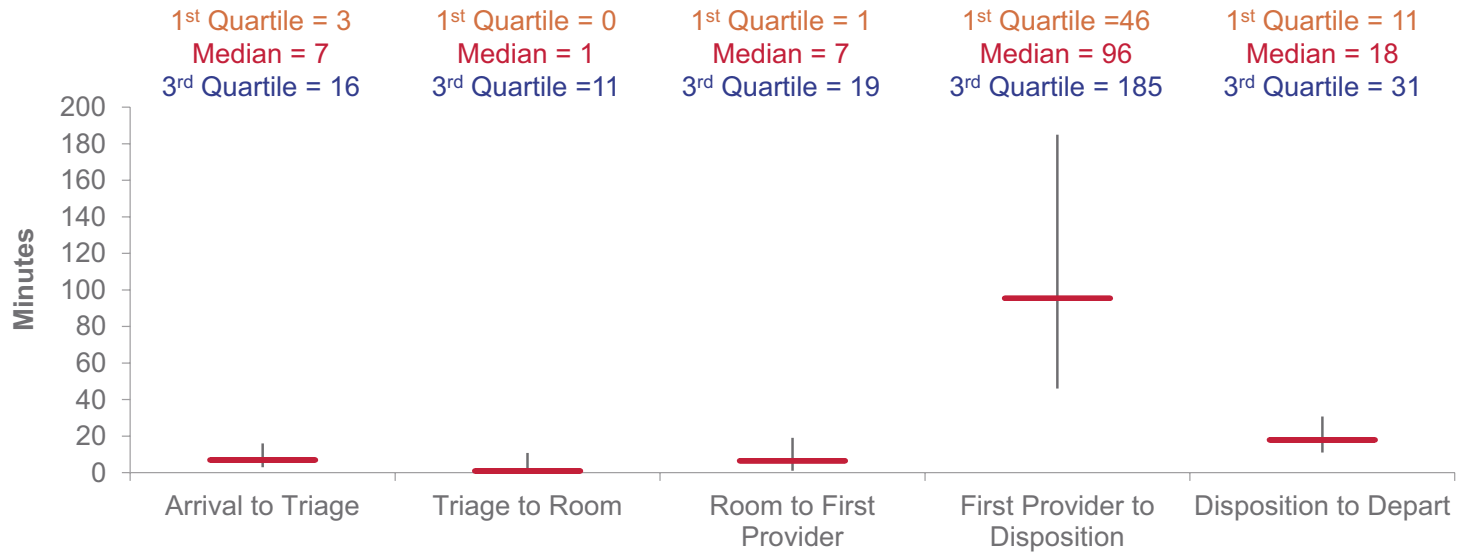
	LWOBS	AMA
Rate	2013	2013
Average	2.68%	0.36%
Minimum	0.11%	0.02%
Maximum	4.65%	1.31%



Note. LWOBS=Left without Being Seen. AMA = Against Medical Advice. Psych patients excluded from analysis.  
Sources: ECMC Patient Level Data, ECMC ED Department-Level Data; CannonDesign Analysis, 2014

# CPEP Patients Move Through Initial Intake and Triage Very Quickly

**Erie County Medical Center Emergency Department  
Patient Throughput, CPEP  
January – December 2013**



Total LOS	
Q1	61
Median	128
Q3	262

Median =

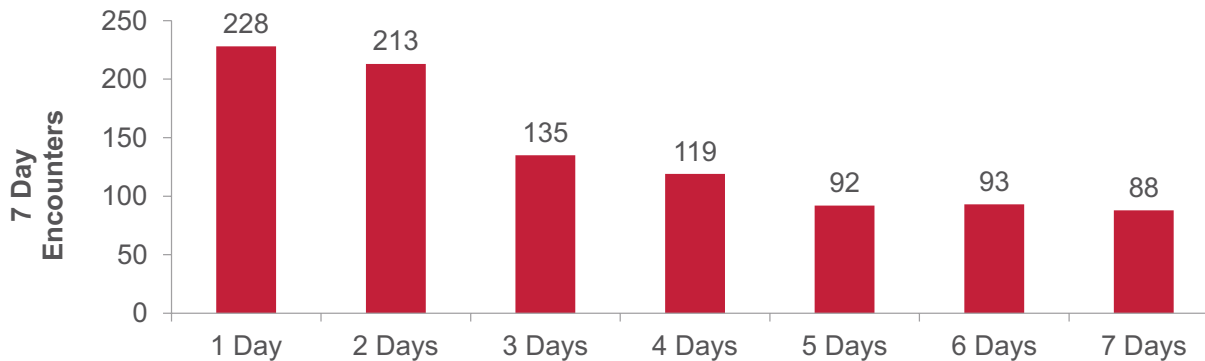
Disposition to Depart = Total LOS – Time from Arrival to Disposition

For Triage to Room, Room to First Provider, and First Provider to Disposition all throughput times of less than 0 were assumed to be 0. For Disposition to Depart, all throughput times of less than 0 were omitted from the analysis. Arrival to Triage: Only ACMC-defined Walk-in patients included, and excludes patients with Disposition of Left Before Triage; Triage to Room. Excludes patients with Disposition of LWOBE, LWOMS, LWOB, LWOMR. Excludes all Non-CPEP Patients. CPEP patient defined by "CPEP" in ER Log.

Sources: Erie County Medical Center ED patient-level data; CannonDesign Analysis 2014.

# 16% of CPEP 7-Day Return Encounters are Admitted to Inpatient Behavior Health Unit Suggesting Failed Community Management

**Erie County Medical Center CPEP  
7 Day Encounters and Readmissions<sup>1</sup>, Adults only  
January – December 2013**



	1 Day	2 Days	3 Days	4 Days	5 Days	6 Days	7 Days
<b>7 Day Return Encounters Admitted to IP Unit</b>	41	36	17	15	16	12	14
<b>% of 7 Day Encounters Admitted to IP Unit</b>	18%	17%	13%	13%	17%	13%	16%
<b>Top Diagnosis of Admitted Encounters (Number of Admits)</b>	Paranoid Schizophrenia unspecified (9)	Schizoaffective Disorder (7)	Schizoaffective Disorder (7)	Paranoid Schizophrenia unspecified (3)	Depression Disorder unspecified (3) / Paranoid Schizophrenia unspecified (3)	Bipolar I (2), Bipolar I Disorder (2), Depression Disorder unspecified (2)	Bipolar Disorder (2), Schizoaffective Disorder (2)

	Volumes
7-Day Return Encounters	968
<b>Bay Demand</b>	<b>1</b>
2013 ED Visits	66,010
% of Encounters Returning to ED within 7 Days	1.5%
7 Day Return Encounters Admitted to IP Unit	151
% of 7-Day Return Encounters Admitted to IP Unit	16%

Note: <sup>1</sup>Readmission defined as an admit by a patient made within 7 days or less of their prior encounter. Duration between ED arrival and prior departure is rounded to nearest whole day. Return visits within <0.5 days were excluded from the return and readmission counts (N=120, 11% of original volumes). 7-Day analysis excludes Patients with disposition "Left without being Examined", "Against Medical Advice", "Dead on Arrival", "Expired". Excludes Pediatric Patients. Pediatric patients defined as Ages 18 or younger. 2013 ED Visits volume include Adults only; excludes Dispositions "DOA", and Non- Psych Patients.

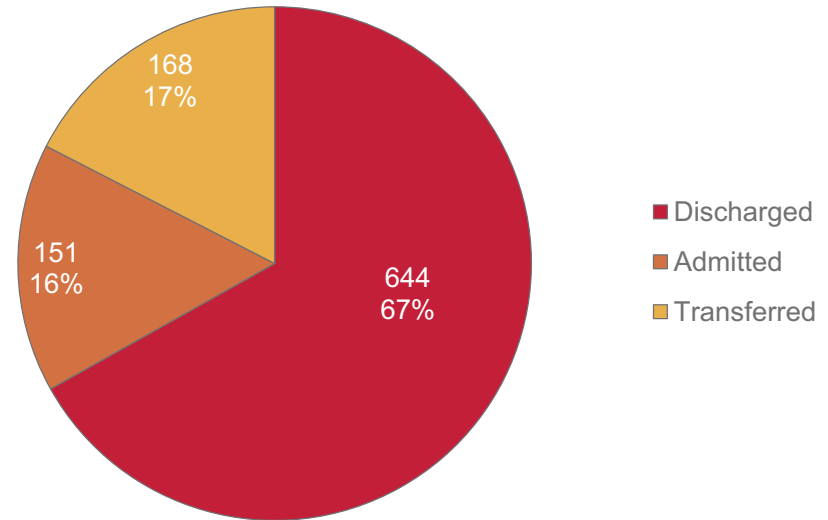
Sources: ECMC ED patient-level data; CannonDesign Analysis, 2014. Total Patients N=1,088

# 10 Diagnoses Account for More than 70% of All 7-Day CPEP Returns

**Erie County Medical Center CPEP, Adult Patients  
7-Day Return Encounters Top 10 Diagnosis by Volume  
January – December 2013**

Diagnosis	Number of Visits
Adjustment Reaction Nos	219
Schizophrenia Nos Unspecified	104
Schizoaffective Disorder	100
Ac Alcohol Intox Unspecified	81
Alcohol Abuse Unspecified	50
Alcoh Dep Nec/Nos Unspecified	43
Depressive Disorder Nec	39
Bipolar Disorder	37
Gen Psychiatric Exam Nec	32
Anxiety State Nos	24
All Other	271
<b>Total</b>	<b>1,000</b>

**Erie County Medical Center CPEP, Adult Patients  
7-Day Return Encounters by Disposition  
January – December 2013**



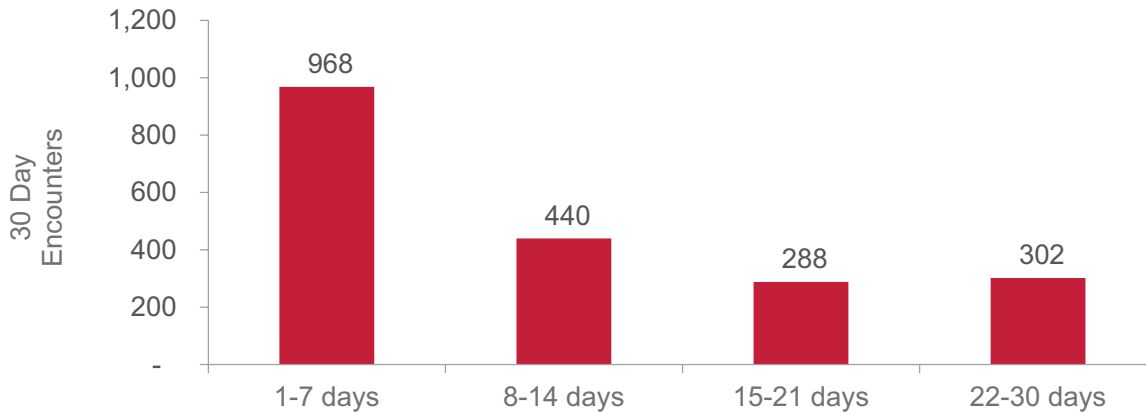
Note: <sup>1</sup>Readmission defined as an admit by a patient made within 7 days or less of their prior encounter. Duration between ED arrival and prior departure is rounded to nearest whole day. Return visits within <0.5 days were excluded from the return and readmission counts (N=332,6% of volumes). Patients with “blank”, and unidentifiable locations as disposition types excluded (N=5) 7-Day analysis excludes Patients with disposition “Left without being Examined”, “Against Medical Advice”, “Dead on Arrival”, “Expired” and Psych . Transfer patients defined as having a transfer DRG disposition type.

Sources: ECMC ED patient-level data; CannonDesign Analysis, 2014.



# Over 20% of 30-Day CPEP Return Encounters are Admitted to an Inpatient Unit, Again Suggesting Failed Community Management

**Erie County Medical Center CPEP  
30 Day Encounters and Readmissions<sup>1</sup>, Adults only  
January – December 2013**



	1-7 days	8-14 days	15-21 days	22-30 days
<b>30 Day Return Encounters Admitted to IP Unit</b>	151	98	76	95
<b>% of 30 Day Encounters Admitted to IP Unit</b>	16%	22%	26%	31%
<b>Top Diagnosis of Admitted Encounters (Number of Admits)</b>	Schizoaffective Disorder (26)	Paranoid Schizophrenia unspecified (15) Schizoaffective Disorder	Paranoid Schizophrenia unspecified (16)	Schizoaffective Disorder (24)

	Volumes
30-Day Return Encounters	1,998
<b>Bay Demand</b>	<b>1</b>
2013 ED Visits*	66,010
% of Encounters Returning to ED within 30 Days	3%
30 Day Return Encounters Admitted to IP Unit	420
% of 30-Day Return Encounters Admitted to IP Unit	21%

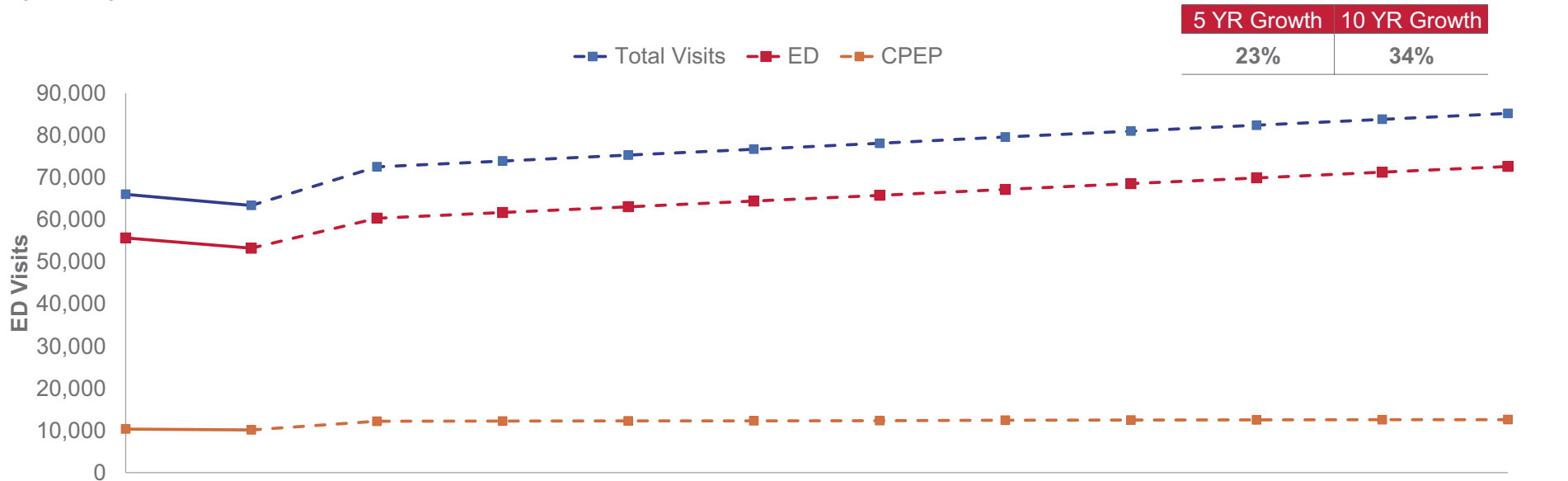
Note: <sup>1</sup>Readmission defined as an admit by a patient made within 7 days or less of their prior encounter. Duration between ED arrival and prior departure is rounded to nearest whole day. Return visits within <0.5 days were excluded from the return and readmission counts (N=120, 6% of volumes). 7-Day analysis excludes Patients with disposition "Left without being Examined", "Against Medical Advice", "Dead on Arrival", "Expired" and Psych. Excludes Pediatric Patients. Pediatric patients defined as Ages 18 or younger. 2013 ED Visits volume include Adults only; excludes Dispositions "DOA", and Psych Patients.

Sources: ECMC ED patient-level data; CannonDesign Analysis, 2014. Total Patients N=1,998

***PROGRAM ASSUMPTIONS***  
**CURRENT STATE PRESENTATION**

# Erie's ED Will Experience Significant Growth Over the Next Decade

**Erie County Medical Center  
ED Visit Projections  
2014 – 2024**



	2013 (actual)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>ED Visits</b>	55,669	53,232	60,334	61,692	63,046	64,406	65,763	67,174	68,534	69,895	71,252	72,608
<b>CPEP Visits</b>	10,341	10,140	12,191	12,227	12,263	12,301	12,338	12,429	12,470	12,506	12,545	12,581
<b>Total Visits</b>	66,010	63,372	72,525	73,919	75,309	76,707	78,101	79,603	81,004	82,401	83,797	85,189

Note: Visits do not include observations or Left Without Being Seen Patients  
Sources: ECMC ED\_CPEP Volume Trends; CannonDesign Analysis 2014

**ED Room Demand Scenario # 1**

Unit / Department	2013				2019		2024		10-Yr Change from Current	2022 DGSF Need - Low	2022 DGSF Need - Medium	2022 DGSF Need - High
	2013 Visits	Benchmark Visits p/ Year/Bed	2013 Actual	Current Need	2019 Visits	2019 Need	2024 Visits	2024 Need				
<b>ED Volumes</b>	66,010	1,500	30	44	78,101	52	85,189	57	+27	37,050	39,900	45,600

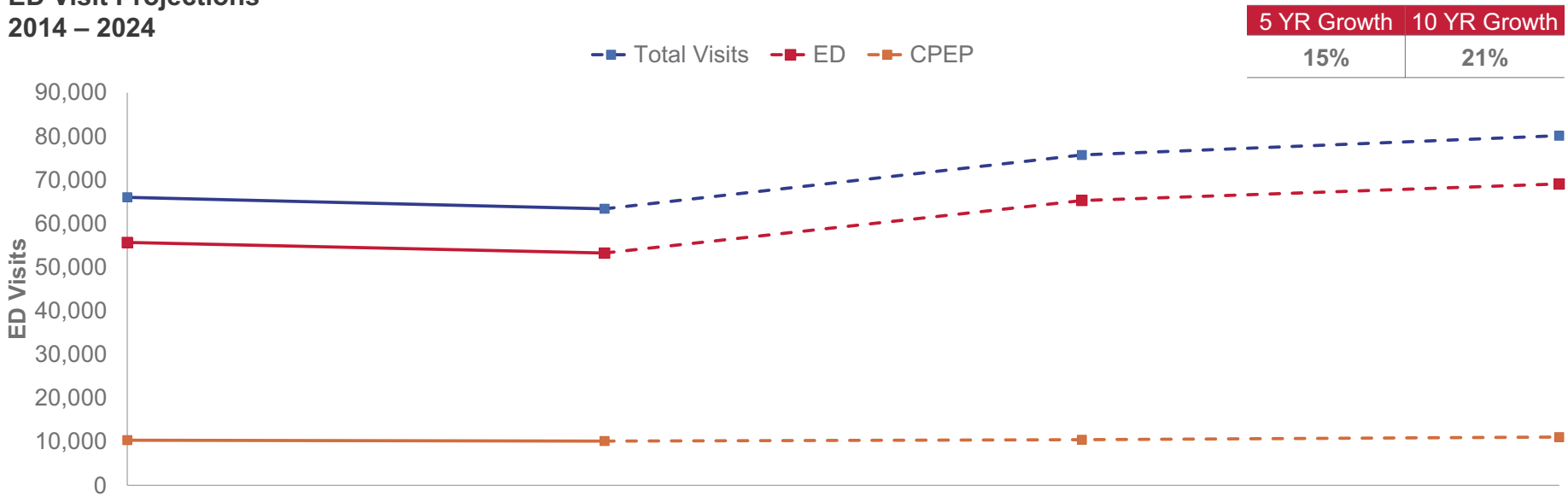
**Emergency Department**

Sensitivity Growth	Volumes	Visits per Exam Room					
		1,400	1,500	1,600	1,700	1,800	2,000
0%	66,010	47	44	41	39	37	33
5%	69,311	50	46	43	41	39	35
10%	72,611	52	48	45	43	40	36
20%	79,212	57	53	50	47	44	40
29%	85,189	61	57	53	50	47	43
35%	89,114	64	59	56	52	50	45

Sources: Advisory Board Outpatient Market Estimator 2014; CannonDesign Analysis 2014

# Erie's ED Will Experience Moderate Growth Over the Next Decade

**Erie County Medical Center  
ED Visit Projections  
2014 – 2024**



	2013 (actual)	2014*	2019	2024
<b>ED Visits</b>	55,669	53,232	65,274	69,076
<b>CPEP Visits</b>	10,341	10,140	10,444	11,052
<b>Total Visits</b>	66,010	63,372	75,718	80,128

Sources: Advisory Board Outpatient Market Estimator 2014; CannonDesign Analysis 2014

## ED Room Demand Scenario # 2

Unit / Department	2013				2019		2024		10-Yr Change from Current	2022 DGSF Need - Low	2022 DGSF Need - Medium	2022 DGSF Need - High
	2013 Visits	Benchmark Visits p/Year/Bed	2013 Actual	Current Need	2019 Visits	2019 Need	2024 Visits	2024 Need				
ED Volumes	66,010	1,500	30	44	75,718	50	80,128	53	+23	34,450	37,100	42,400

### Emergency Department

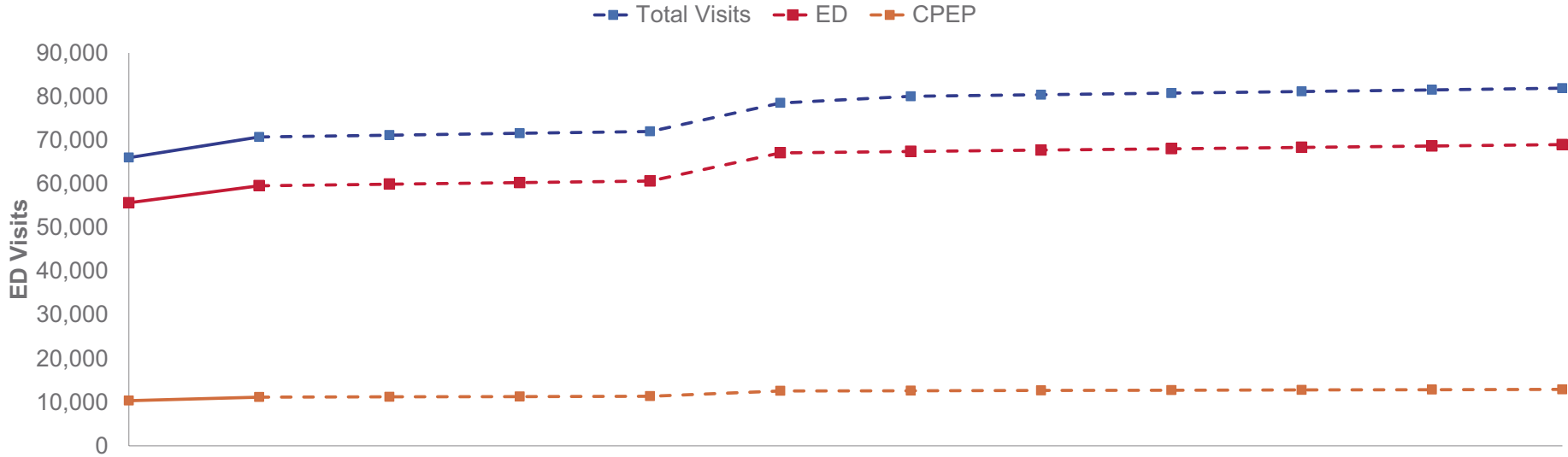
Sensitivity Growth	Volumes	Visits per Exam Room					
		1,400	1,500	1,600	1,700	1,800	2,000
0%	66,010	47	44	41	39	37	33
5%	69,311	50	46	43	41	39	35
10%	72,611	52	48	45	43	40	36
15%	75,912	54	51	47	45	42	38
21%	80,128	57	53	50	47	45	40
35%	89,114	64	59	56	52	50	45

Sources: Advisory Board Outpatient Market Estimator 2014; CannonDesign Analysis 2014

# Merging Scenario #2 with Predictable Volume Jumps Not Included in Either Scenario Increases Overall Projected Volume

**Erie County Medical Center  
ED Visit Projections  
2014 – 2024**

<b>5 YR Growth</b>	<b>10 YR Growth</b>
15%	21%



	2013 (actual)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>ED Visits</b>	55,669	59,570	59,927	60,287	60,648	67,113	67,422	67,732	68,044	68,357	68,671	68,987
<b>CPEP Visits</b>	10,341	11,153	11,220	11,288	11,355	12,566	12,624	12,682	12,740	12,799	12,858	12,917
<b>Total Visits</b>	66,010	70,723	71,147	71,574	72,004	78,537	80,046	80,414	80,784	81,156	81,529	81,904

Sources: Advisory Board Outpatient Market Estimator 2014; CannonDesign Analysis 2014

**ED Room Demand Scenario # 3**

Unit / Department	2013				2019		2024		10-Yr Change from Current	2022 DGSF Need - Low	2022 DGSF Need - Medium	2022 DGSF Need - High
	2013 Visits	Benchmark Visits p/Year/Bed	2013 Actual	Current Need	2019 Visits	2019 Need	2024 Visits	2024 Need				
<b>ED Volumes</b>	66,010	1,500	30	44	80,046	53	81,904	55	+25	35,750	38,500	44,000

**Emergency Department**

Sensitivity Growth	Volumes	Visits per Exam Room					
		1,400	1,500	1,600	1,700	1,800	2,000
0%	66,010	47	44	41	39	37	33
5%	69,311	50	46	43	41	39	35
10%	72,611	52	48	45	43	40	36
15%	75,912	54	51	47	45	42	38
24%	81,904	59	55	51	48	46	41
35%	89,114	64	59	56	52	50	45

Sources: Advisory Board Outpatient Market Estimator 2014; CannonDesign Analysis 2014



## ECMC ED Campus Radiology Forecast

Department	Existing		2019 Projection		2024 Projection			2024 DGSF Need – Low	2024 DGSF Need - Medium	2024 DGSF Need - High
	Existing Units	2013 Volumes	2017 Volumes	2017 Need	2022 Volumes	Utilization	2022 Need			
X-Ray	0	59,308	60,494	2	61,087	60%	2	3,600	3,975	4,500
CT	0	25,850	26,626	2	28,694	60%	2	4,500	4,875	6,000
Ultrasound	0	2,071	2,299	1	2,568	60%	1	750	800	900
Nuclear Medicine	0	605	611	0	641	60%	0	1,200	1,500	1,600
MRI	0	1,814	1,923	0	2,014	60%	0	2,200	2,200	2,600
<b>Total</b>		<b>89,648</b>	<b>91,952</b>	<b>5</b>	<b>95,004</b>		<b>5</b>	<b>14,650</b>	<b>16,000</b>	<b>18,600</b>

Note: 2024 volumes calculated using Advisory Board Outpatient Market Estimator.

Source: ECMC ED Radiology Procedural Level Data; Advisory Board Outpatient Market Estimator 2014; CannonDesign Analysis, 2014

***EMERGENCY DEPARTMENT VISIONING SESSION***

The Current State Assessment and Visioning Session Focused On Performance Optimization in the Emergency Department. The Performance Wheel Depicts Each of the Core Areas of Optimal Performance.

**Growth**

Does the department and its operations support and promote the ability to successfully grow and evolve?

**Service Excellence**

Does the organization deliver services in a manner that is patient-centric?

**Alignment & Integration**

Are physicians and staff aligned with the mission, vision and performance goals of the Emergency Department?

**SIX CORE AREAS OF OPTIMAL PERFORMANCE**



**Quality & Outcomes**

Does the care provided meet and / or exceed the standard of care for Emergency Medicine?

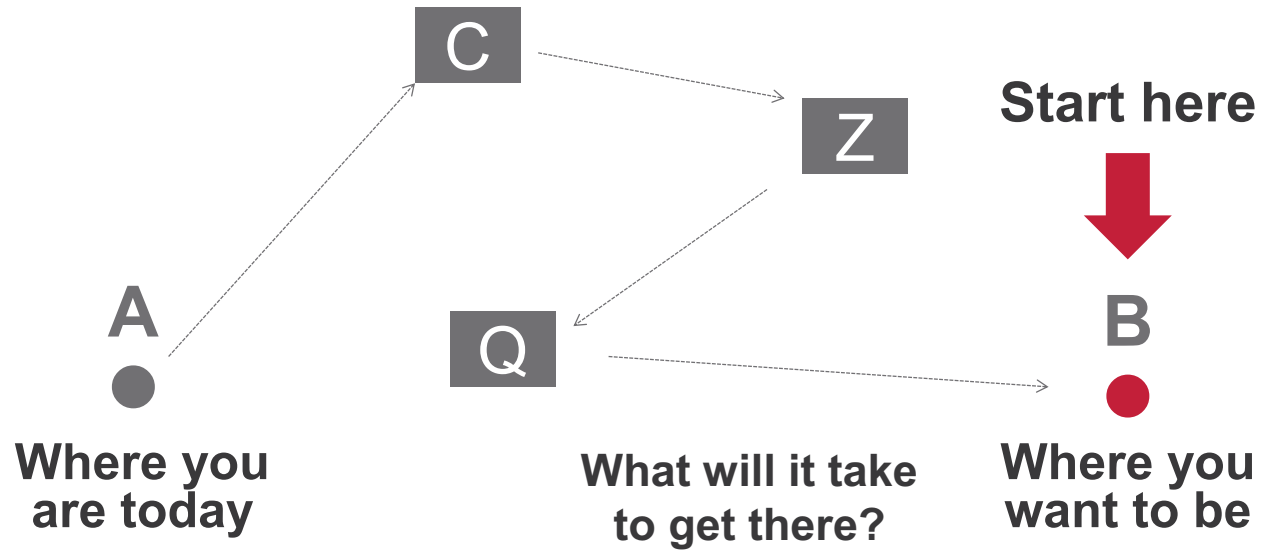
**Fiscal Stewardship**

Does the department support the optimized balance between revenue and expenses?

**Operational Efficiency**

Do the processes support efficient patient flow and staff work flow?

Outcomes-Based Visioning



**Outcomes-Based Visioning Begins With Identifying Desired Outcomes**

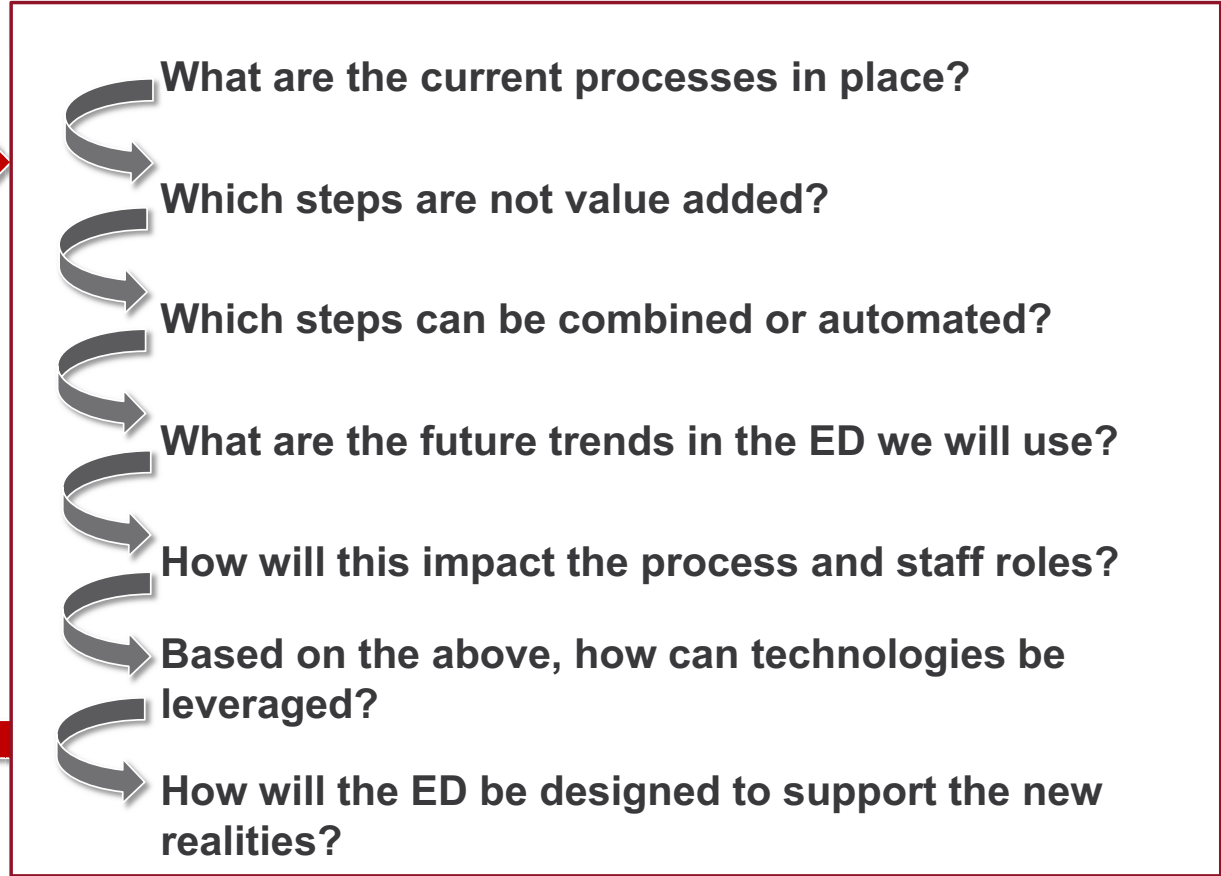
- Countless studies have demonstrated that improved clinical quality reduces total cost of care
- Operational improvements can increase capacity without necessarily requiring resources
- Throwing money or staff at a problem is not always the best solution
- Innovation and a shift in care venue will drive change

# TARGETED OUTCOMES SHOULD DRIVE THE OVERALL DESIGN EXPERIENCE



**Target Outcome**

**Convert 50% of LWBS Patients to ED Visits**





Harold, 92 year-old, Male  
Altered Mental Status

Harold is a fairly active resident of his nursing home. He is frequently seen socializing with the other residents and the staff. He gets around well and maintains high levels of cognition. Today his family came for their weekly visit and found Harold in bed. He was confused, disoriented and did not want to get out of bed. When his family stood him up he refused to walk. Concerned about his well-being, Harold's family has the nursing home call EMS to transport him to the hospital.

	PATIENT	FAMILY	STAFF	PHYSICIAN / EXTENDER	EMS (if applicable)
Arrival Onto the Campus	1.Ease of Access	1.Needs Parking 2. Reassurance of Family member's safety 3.Wayfinding	1.Information about Patient and notice he will be arriving	1. Patient	1.Backboard to take patient in (?)
Initial Greeting and Intake	1. Needs Explanation of why he is in hospital 2. Reassurance of Safety 3. Communication about what is happening to him	1.Information regarding Harold 2.Need to see him 3.Reassured of safety and health of family member	1.Proper Equipment, monitors and supplies 2.Right competencies and resources 3. Attentive staff 4.Patient	1.Family in the room	
Primary Assessment (Nurse and Physician / Extender)	1. Pain Mgmt.	1.Information about Patients Assessment 2.Information regarding next steps and what to expect	1. Same as Above	1.Treatment bay 2.Patient in gown and space for assessment	
Diagnostics	1. X-ray 2.Lab 3.Results of Test	1.Proximity to grandfather and close to where results will be given	1.Get them to Diagnostics quickly 2.Needs Results Quickly	1.Family in the room to explain results	
Disposition and Departure from ED	1.Placement in bed quickly 2.Continued Communication about next steps	1.Needs to know Plan of Care 2.Amenities (cell phone chargers, information about hotels, etc), Hospitality 3.Timely Disposition 4.Communication	1.Place to send patient 2.Transport if needed	1.Accepting service for admits (fast admit process) 2.Availability of consult if needed	1. Appreciation from ED Staff



Marco, 18 year-old, Male  
Trauma Alert - MVA

Marco is one the stars of a local high school football team. At 18, his prospects for a football scholarship are looking better every day. Two weeks ago one of Marco's friends got his drivers license and entered the daring world of the roads. Tonight Marco was coming home from the movies. It was raining and the roads were slick. Rounding a bend, Marco's friend lost control of the car slid into a tree. When EMS found Marco he was pinned in the car and disoriented. After a prolonged extrication EMS loaded Marco into the ambulance and set off for the ED, calling a trauma alert on the way.

	PATIENT	FAMILY	STAFF	PHYSICIAN / EXTENDER	EMS (if applicable)
Arrival Onto the Campus	<ol style="list-style-type: none"> <li>1.Immediate placement to room</li> <li>2.Trauma team waiting</li> </ol>	<ol style="list-style-type: none"> <li>1.Greeted by person</li> <li>2.Parking</li> <li>3.Information about Son</li> <li>4.Physically see patient</li> <li>5.Reassurance of Family member's safety</li> <li>6.Wayfinding</li> </ol>	<ol style="list-style-type: none"> <li>1.Onset of people will be coming- Staff needs to be prepared and able to manage crowds</li> </ol>	<ol style="list-style-type: none"> <li>1.Trauma Team Pre-Notification</li> <li>2.Equipment</li> </ol>	
Initial Greeting and Intake	<ol style="list-style-type: none"> <li>1.Immediate attention</li> <li>2.Mom and Dad</li> </ol>	<ol style="list-style-type: none"> <li>1.Privacy</li> <li>2.Information about what is happening</li> <li>3.Coordination of Care</li> </ol>	<ol style="list-style-type: none"> <li>1.. Proper Equipment, monitors and supplies</li> <li>2.Right competencies and resources</li> <li>3. Attentive staff</li> <li>4.Patient</li> </ol>		
Primary Assessment (Nurse and Physician / Extender)	<ol style="list-style-type: none"> <li>1.Trauma Workup</li> <li>2.Privacy</li> <li>3.Patient Education</li> </ol>	<ol style="list-style-type: none"> <li>1.Need information about what is happening</li> </ol>	<ol style="list-style-type: none"> <li>1.Space</li> </ol>		
Diagnostics	<ol style="list-style-type: none"> <li>1.Fast Diagnostics</li> <li>2.Accurate</li> </ol>		<ol style="list-style-type: none"> <li>1.Get them to Diagnostics quickly</li> <li>2.Needs Results Quickly</li> </ol>		
Disposition and Departure from ED	<ol style="list-style-type: none"> <li>1.Quick Disposition</li> </ol>	<ol style="list-style-type: none"> <li>1.De-escalation (if needed ?)</li> <li>2.Psychosocial support</li> <li>3.Timely Disposition</li> </ol>			<ol style="list-style-type: none"> <li>1. Appreciation from ED Staff</li> </ol>



Elizabeth, 36 year-old, Male  
Suicide Attempt

Elizabeth has been under a lot of pressure. A first time mom, she gave birth to her daughter about two months ago. Since then Elizabeth has been feeling more and more depressed. Even getting out of bed to care for her daughter seems like a major undertaking. Today Elizabeth's partner came home and found Elizabeth semi-conscious with an empty bottle of sleeping pills laying next to her. EMS brought Elizabeth to the ED. After initial stabilization and management Elizabeth was medically cleared and is awaiting placement in a behavioral health facility.

	PATIENT	FAMILY	STAFF	PHYSICIAN / EXTENDER	EMS (if applicable)
Arrival Onto the Campus	<ol style="list-style-type: none"> <li>Needs to feel safe</li> <li>Privacy</li> <li>Communication about what is happening</li> </ol>	<ol style="list-style-type: none"> <li>Parking</li> <li>Signage regarding where to go (Wayfinding)</li> <li>Reassurance of Family member's safety</li> <li>Wayfinding</li> </ol>	<ol style="list-style-type: none"> <li>Know who is coming</li> <li>Know EMS info and report</li> </ol>		
Initial Greeting and Intake	<ol style="list-style-type: none"> <li>Rapid Intake</li> </ol>	<ol style="list-style-type: none"> <li>De-escalation May be needed</li> </ol>	<ol style="list-style-type: none"> <li>Medical History</li> <li>Place to put her</li> <li>Need to know they are safe if patient is escalated</li> </ol>		
Primary Assessment (Nurse and Physician / Extender)	<ol style="list-style-type: none"> <li>Safety and Discretion</li> </ol>	<ol style="list-style-type: none"> <li>Space to accommodate baby and Dad</li> </ol>		<ol style="list-style-type: none"> <li>Access to family and parents</li> <li>Privacy to counsel</li> </ol>	
Diagnostics	<ol style="list-style-type: none"> <li>Same as above.</li> </ol>				
Disposition and Departure from ED		<ol style="list-style-type: none"> <li>Timely Disposition</li> </ol>			<ol style="list-style-type: none"> <li>All Equipment returned</li> <li>Appreciation from ED Staff</li> </ol>



***Recommendations (Next Steps)***

## Transforming Care - Process Improvement

Door to Doctor - minimize time, steps and people seen before seeing physician

### Triage

- Avoid duplication of triage information and RN documentation
- Reduce Comprehensive Triage - Focus on chief complaint  
or
- Enhance Triage - Consider physician based in Triage

### Registration

- Quick registration
- Bedside registration
- MedKiosk – self-service check-in technology

### Split-Patient Flow

- Specific criteria to separate out at Triage
- Keep less-sick patients upright (chairs) and dressed
- Save beds for sicker patients
- Intake/Discharge Hubs



## Process Improvement

### Testing

- Consider pre-emptive testing (approved protocol) during waiting (downtime)
- Point-of-Care Testing area(s) proximate to each clinical cluster or module

### Imaging

- Diagnostic Radiology/CT within ED
  - 1 per 30,000 visits; if not immediately adjacent
  - DI close to Triage and Trauma
  - CT readily accessible from Trauma
  - US - mobile

### Technology - Applications

- Electronic patient tracking
- EMR
- Electronic physician order entry and charting
- Digital imaging
- Telemedicine protocol with tertiary/quaternary center



## Surge Capacity

- Manage influx of patients and mass decontamination
- Equip parking lots and garages to enable triage and decontamination away from hospital (power, gas, water, electrical and utility box)
- Facility innovations
  - Separate decontamination entrances to prevent spread
  - Hot versus cold zones
  - Isolation zones with separate HVAC and negative-pressure
  - Mobile isolation beds and tents
- Room innovations
  - Additional headwalls in rooms
  - Wireless communications
  - Hands-free equipment and lighting
  - Telemedicine
  - Self-decontaminating surfaces (silver-ion hardware)
  - Ceiling membranes that prevent the escape of harmful microbes



***APPENDIX***

**ERIE COUNTY MEDICAL CENTER**  
Buffalo, NY



EXISTING EMERGENCY DEPARTMENT FLOOR PLAN

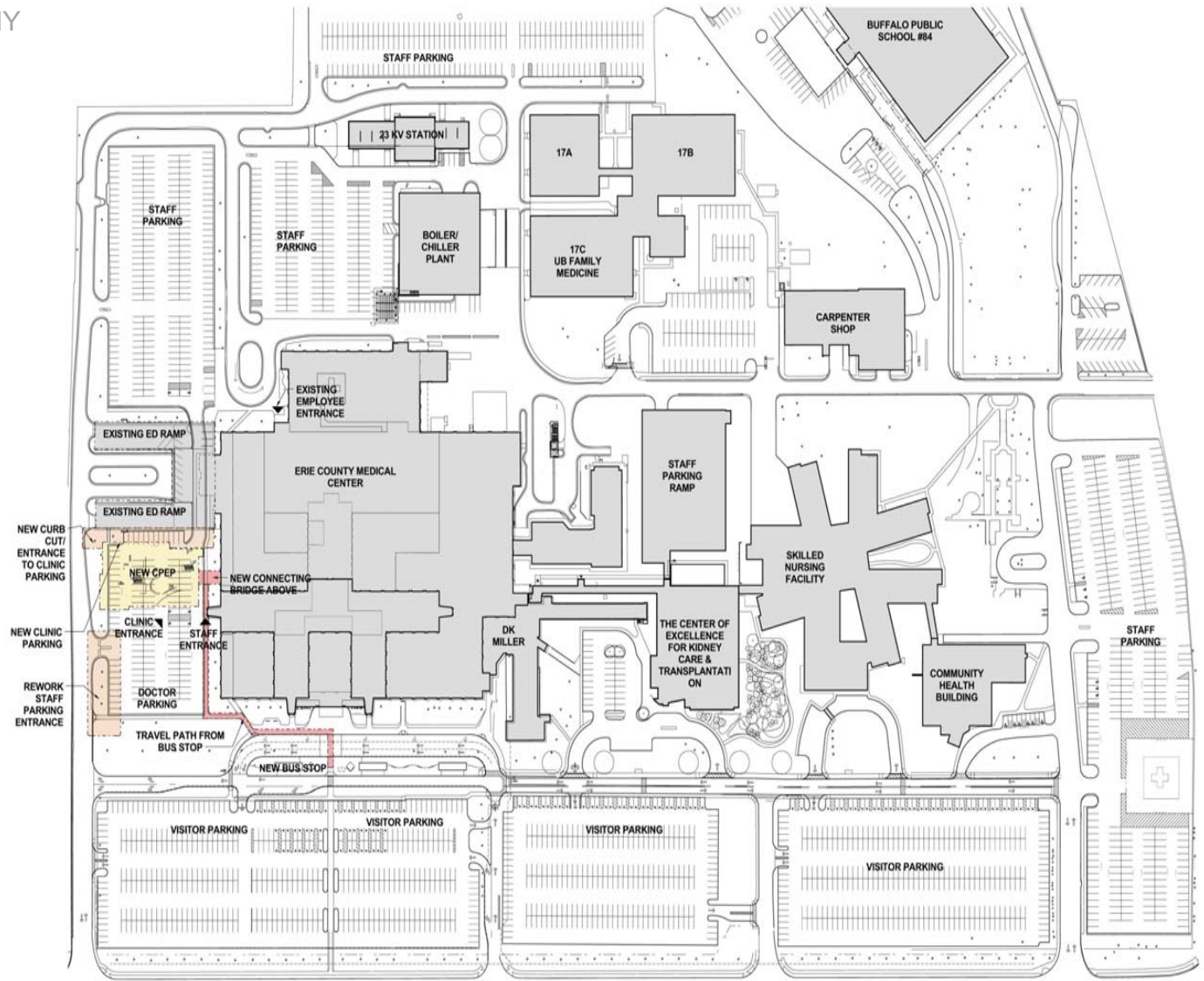
**ERIE COUNTY MEDICAL CENTER**  
Buffalo, NY

- ADULT CPEP
- EXTENDED OBSERVATION
- FAST TRACK
- CHILDREN'S CPEP
- CENTRALIZED SUPPORT



EXISTING  
CPEP  
FLOOR PLAN

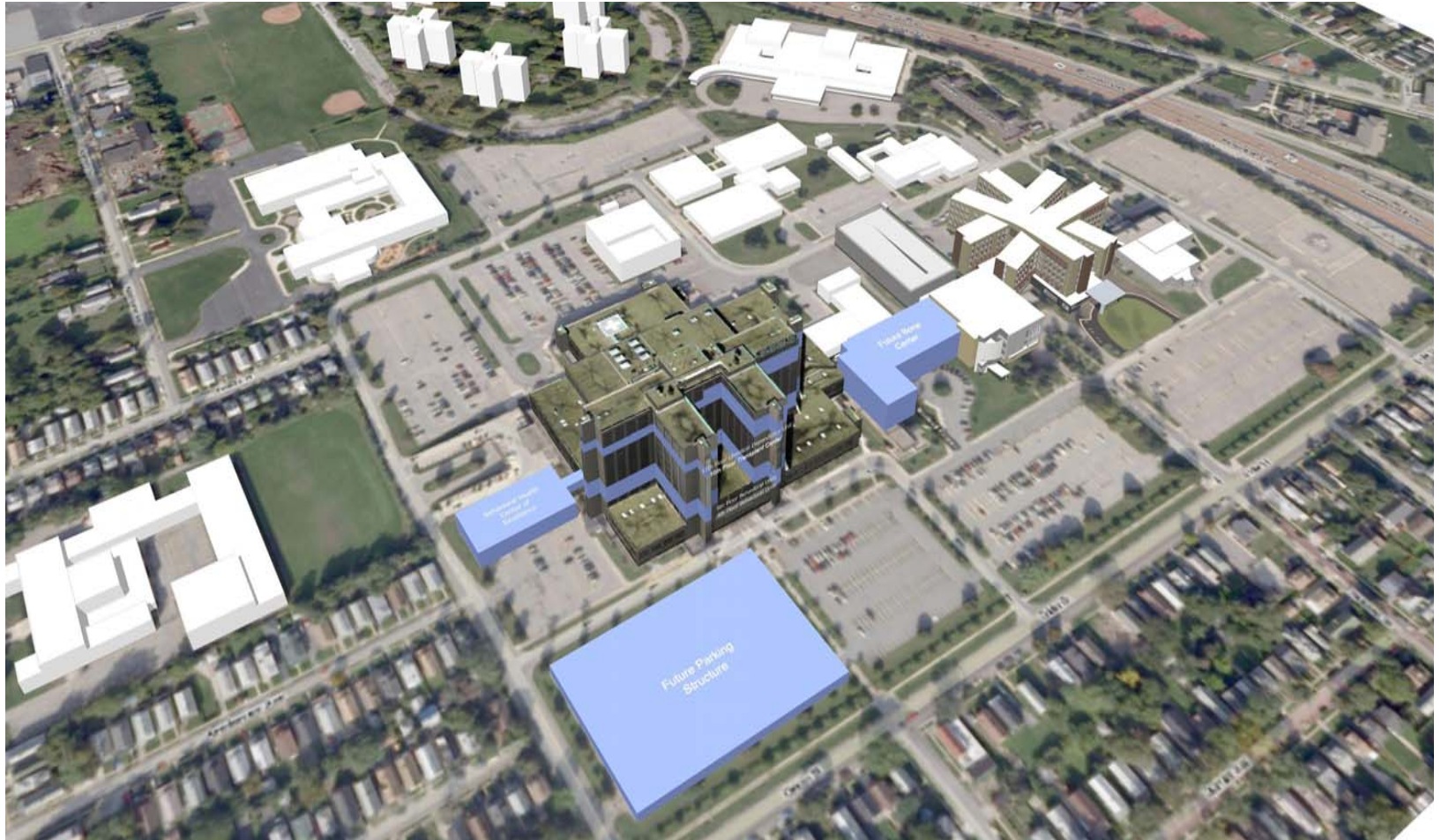
**ERIE COUNTY MEDICAL CENTER**  
Buffalo, NY



SITE PLAN



**ERIE COUNTY MEDICAL CENTER**  
Buffalo, NY



SITE  
DIAGRAM

**AESTHETICS AND EXPERIENCE**

- FIRST IMPRESSIONS- *LOBBY*
- POSITIVE DISTRACTIONS- *LOBBY PROGRAMMING*
- DAYLIGHT AND LIGHTING
- VISUAL CLUTTER
- NATURAL MATERIALS- *WOOD, STONE, WARMTH*
- COLOR
- ACOUSTICS- *STRESS & ANXIETY REDUCING*
- INTUITIVE WAYFINDING-  
*STRESS & ANXIETY REDUCING*

