NH Community Behavioral Health ASSOCIATION

POLICY PAPER

REDUCING VARIABILITY IN EMERGENCY DEPARTMENT TREATMENT FOR PATIENTS IN A MENTAL HEALTH CRISIS

SEPTEMBER 2018

PROJECT BACKGROUND

The Emergency Services Learning Collaborative (ESLC) was developed in early 2018 by the NH Community Behavioral Health Association (NHCBHA) to provide a discussion forum for members of the NHCBHA, the community Mobile Crisis Response Teams (MCRTs), the Designated Receiving Facilities (DRFs), and New Hampshire Hospital (NHH) (participant list in Appendix). The group established five monthly one-hour meetings between February and June 2018.

The purpose of the ESLC was to:

- Seek out the best clinical and crisis management practices as they relate to patient risk;
- Leverage the experience of the CMHCs, MCRTs, DRFs, and NHH;
- Develop a set of recommendations for the respective organizations and policy makers, and;
- Ensure linkage with New Hampshire Hospital Association (NHHA) Behavioral Health Professional Peer Group.

ENVIRONMENTAL CONTEXT

In order to have context in which to evaluate this paper's findings and recommendations, it is important to understand the perspective of the ESLC's members with regard to the current emergency services environment in New Hampshire.

1 New Hampshire's citizens and their families are not receiving timely treatment, as evidenced by the wait list for beds at NHH and the resulting emergency department crisis. The wait list number at NHH has reached a one day high of 71 adults and 27 children in recent years. Since the spring of 2015, there has been a steady upward trend of adults waiting for beds at NHH, and slight declining trend for children (**Figure 1**).[1]

[1]Source: NAMI NH website accessed September 17, 2018: https://datastudio.google.com/reporting/0B3WCWgxbaMH_NjE1M3c2UzNhYmM/page/iubH

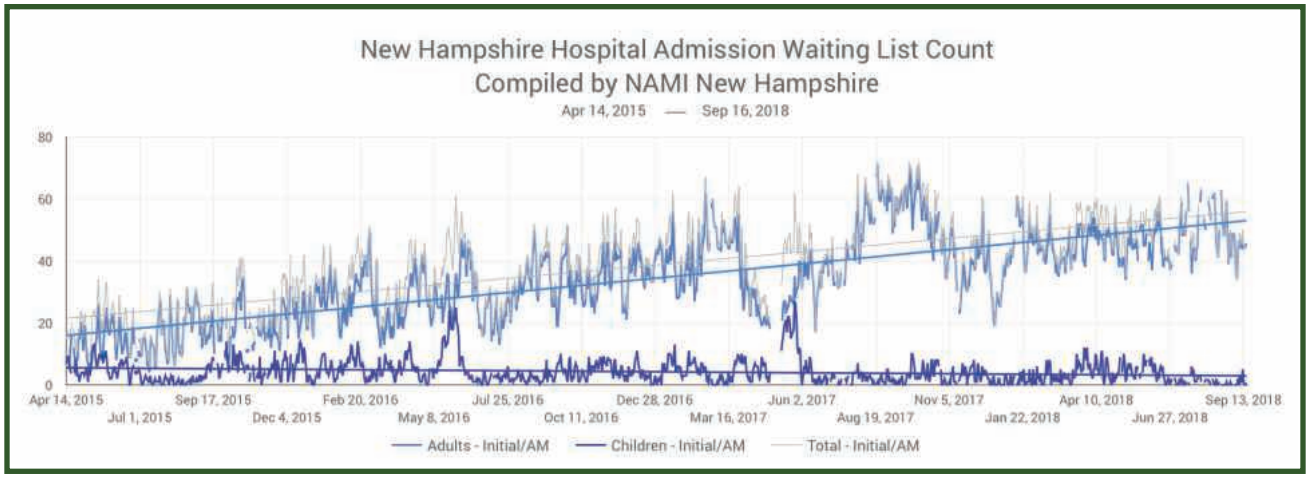


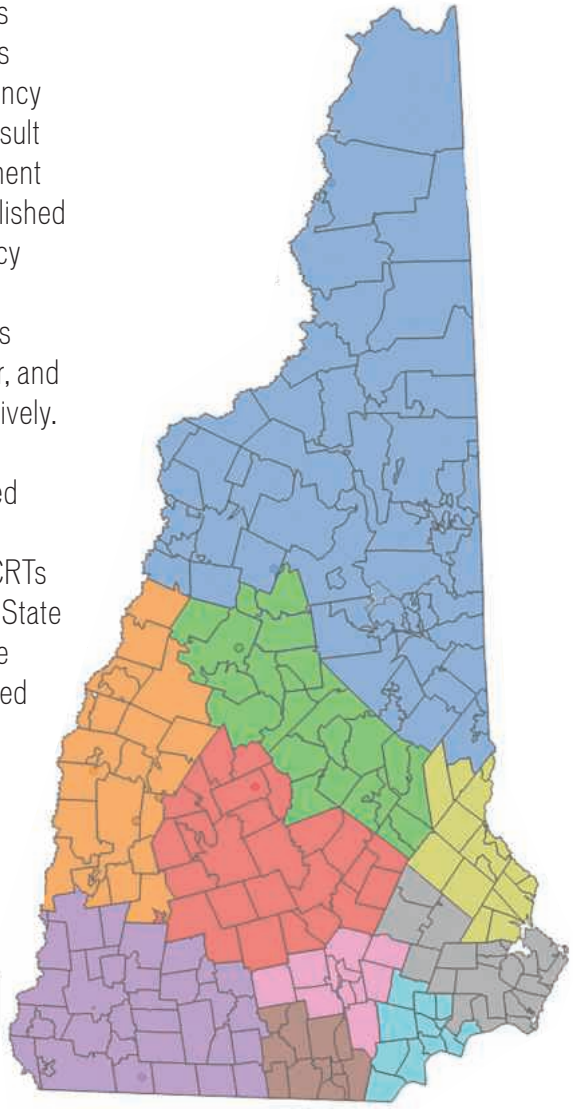
Figure 1

2 In CY 2016 and CY 2017, the CMHCs provided a total of 32,800 and 29,105 emergency services visits, respectively **(Figure 2)**.[2] These emergency services visit counts exclude non-billable services for four of the CMHCs as well as emergency services provided by the MCRTs. As a result of the Community Mental Health Agreement (CMHA)[3], three MCRTs have been established in order to divert patients from emergency departments and provide more timely treatment in a community setting. MCRTs were developed in Concord, Manchester, and Nashua in 2015, 2016, and 2017, respectively.

In CY2017, there were 4,339 unduplicated people served and 5,052 emergency department diversions **(Figure 3)**[4]. MCRTs have not been historically funded by the State at a level that has covered the cost of the programs, nor have monies been allocated for MCRT development in all ten CMHC regions. The state's long term plan for similar MCRT services implemented statewide is undetermined.

Figure 2

ANNUAL EMERGENCY SERVICE VISITS BY CENTER



REGION 01 - NORTHERN
CY 2017 – 1,656 visits
CY 2016 – 1,806 visits

REGION 02 - WEST CENTRAL
CY 2017 – 692 visits
CY 2016 – 547 visits

REGION 03 - LAKES REGION
CY 2017 – 2,016 visits
CY 2016 – 2,356 visits

REGION 04 - RIVERBEND
CY 2017 – 4,455 visits
CY 2016 – 4,251 visits

REGION 05 - MONADNOCK
CY 2017 – 1,265 visits
CY 2016 – 1,363 visits

REGION 06 - NASHUA
CY 2017 – 1,467 visits
CY 2016 – 1,541 visits

REGION 07 - MANCHESTER
CY 2017 – 6,693 visits
CY 2016 – 9,504 visits

REGION 08 - SEACOAST
CY 2017 – 3,287 visits
CY 2016 – 3,278 visits

REGION 09 - COMM. PARTNERS
CY 2017 – 944 visits
CY 2016 – 1,228 visits

REGION 10- CNTR LIFE MGMNT
CY 2017 – 4,613 visits
CY 2016 – 4,910 visits

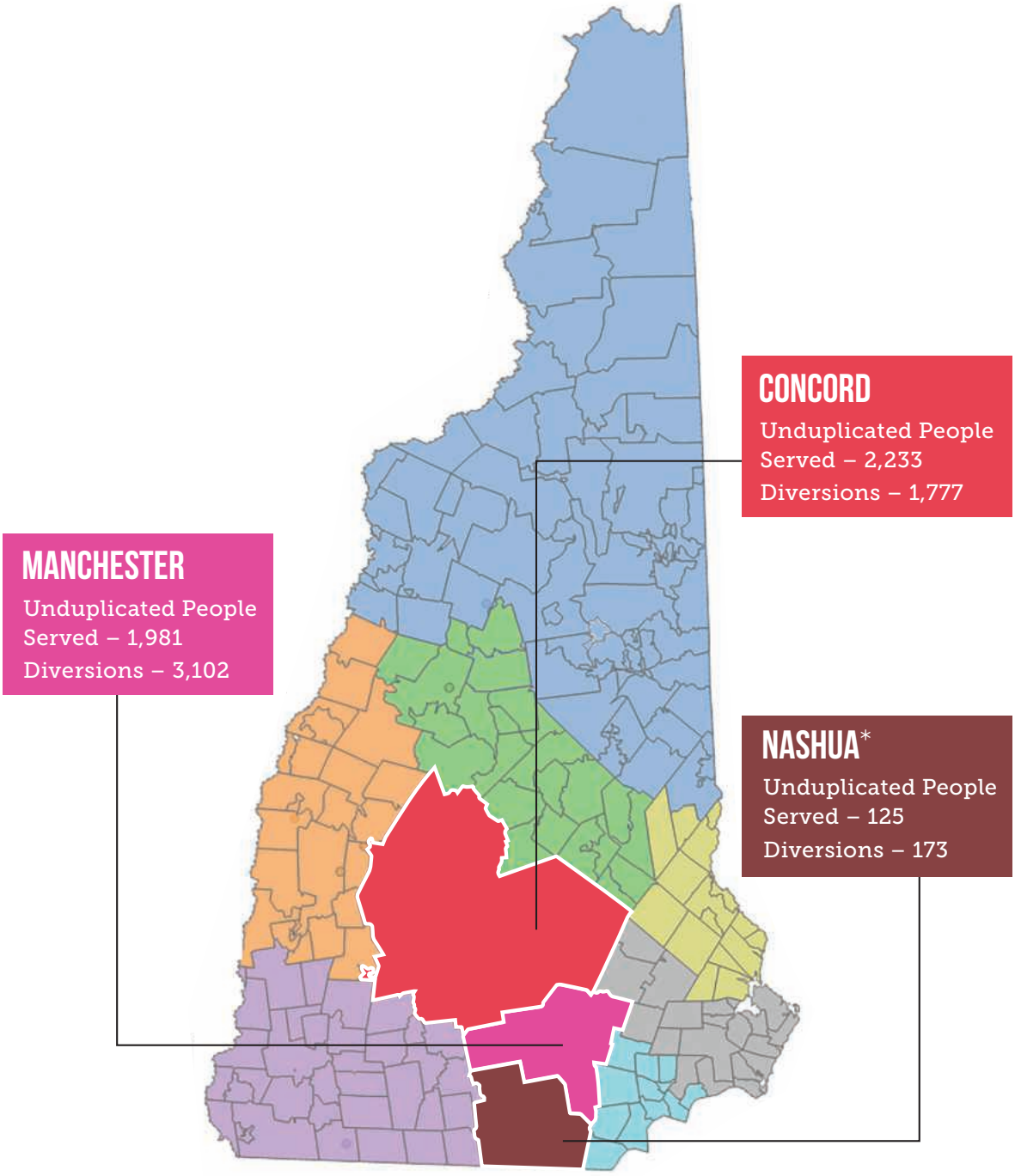
[2] Sources: NH DHHS Phoenix Report, received from NH DHHS June 2018 and CMHC-generated data.

[3] Source: NH DHHS website, accessed June 1, 2018, https://www.dhhs.nh.gov/dcbcs/bbh/settlement.htm

[4] Source: Community Mental Health Agreement Quarterly Progress Reports, accessed May 28, 2018, https://www.dhhs.nh.gov/dcbcs/bbh/progress-reports.htm

Figure 3

MOBILE CRISIS RESPONSE TEAMS CY 2017



*Incomplete data as program not in place for all of 2017

3 There are resource inequities across the state in that the same services are not available in all communities which could benefit from similar services **(Figures 4-5)**. These inequities often result in different standards of care being applied and lack of timely access for certain services. The total number of beds and other, community resources in **Figures 4-5** do not account for the fact that most facilities run very high census rates, thus leaving no service capacity in some communities. Additionally, not all beds are available to some patients due to age restrictions (e.g., geriatric psychiatry) and types of insurance accepted.

Figure 4

REGIONAL RESOURCES :

Inpatient Psychiatric Beds

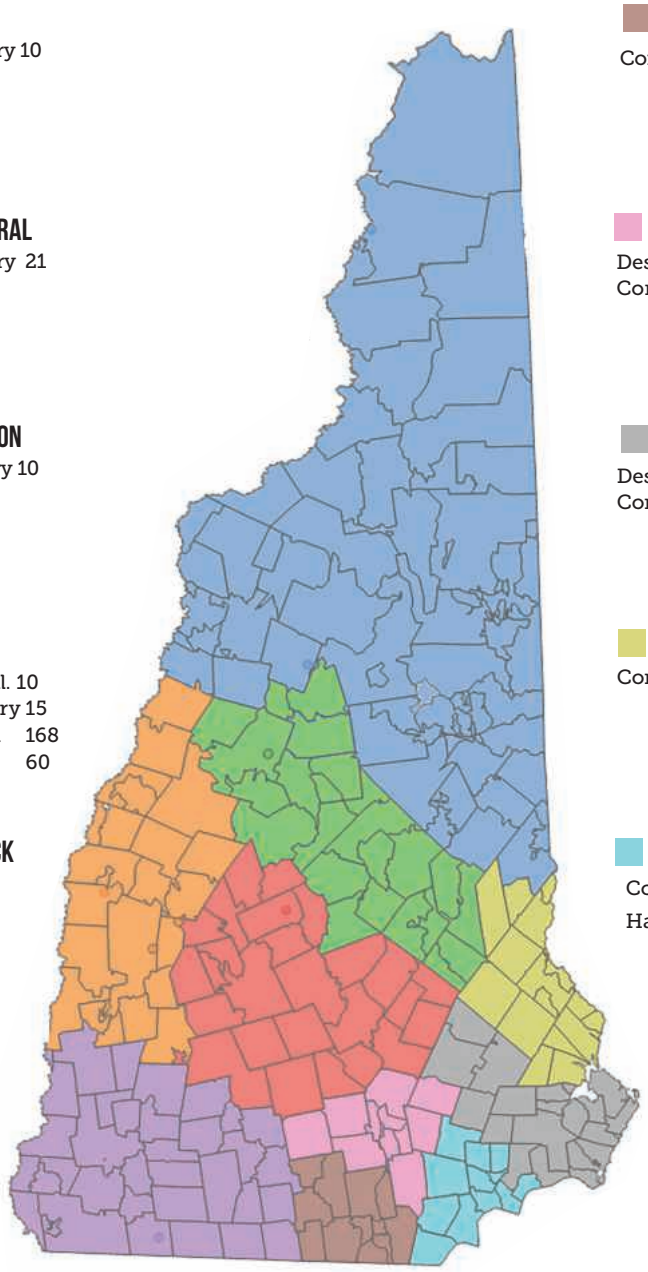
REGION 01 - NORTHERN
Comm. Hospital/Voluntary 10

REGION 02 - WEST CENTRAL
Comm.Hospital/Voluntary 21

REGION 03 - LAKES REGION
Comm. Hospital/Voluntary 10

REGION 04 - RIVERBEND
Designated Receiving Facil. 10
Comm. Hospital/Voluntary 15
New Hampshire Hospital 168
State Prison Unit 60

REGION 05 - MONADNOCK



REGION 06 - NASHUA
Comm. Hospital/Voluntary 18

REGION 07 - MANCHESTER
Designated Receiving Facil. 30
Comm. Hospital/Voluntary 23

REGION 08 - SEACOAST
Designated Receiving Facil. 12
Comm. Hospital/Voluntary 30

REGION 09 - COMM. PARTNERS
Comm. Hospital/Voluntary 20

REGION 10 - CNTR LIFE MGMNT
Comm. Hospital/Voluntary 14
Hampstead Hospital 67

Figure 5

REGIONAL RESOURCES :

Other Community Beds and Housing

REGION 01 - NORTHERN

Supported Housing Beds	35
Transitional Housing	8

REGION 02 - WEST CENTRAL

Supported Housing Beds	16

REGION 03 - LAKES REGION

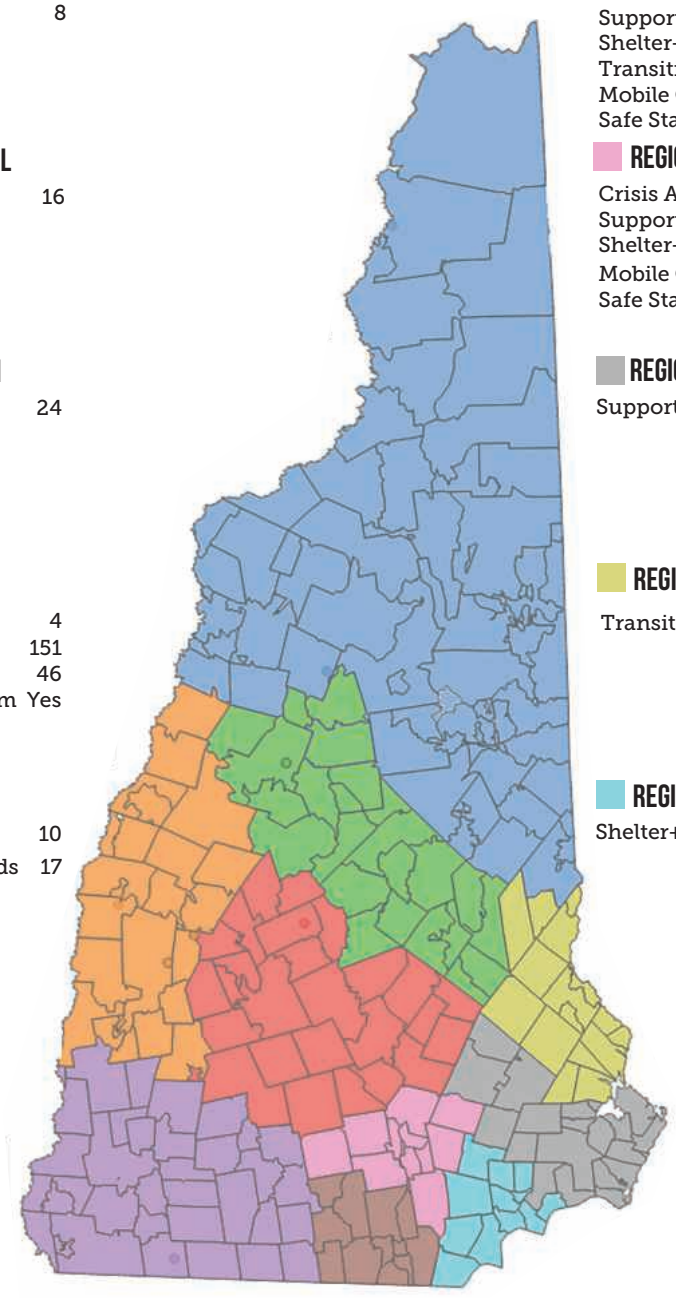
Supported Housing Beds	24

REGION 04 - RIVERBEND

Crisis Apartment Beds	4
Supported Housing Beds	151
Transitional Housing	46
Mobile Crisis Response Team	Yes

REGION 05 - MONADNOCK

Supported Housing Beds	10
Shelter+HUD Supported Beds	17



REGION 06 - NASHUA

Crisis Apartment Beds	4
Supported Housing Beds	23
Shelter+HUD Supported Beds	17
Transitional Housing	14
Mobile Crisis Response Team	Yes
Safe Stations	Yes

REGION 07 - MANCHESTER

Crisis Apartment Beds	4
Supported Housing Beds	191
Shelter+HUD Supported Beds	20
Mobile Crisis Response Team	Yes
Safe Stations	Yes

REGION 08 - SEACOAST

Supported Housing Beds	8

REGION 09 - COMM. PARTNERS

Transitional Housing	3

REGION 10 - CNTR LIFE MGMNT

Shelter+HUD Supported Beds	120

4 In 2005, the total number of acute care hospital psychiatric licensed hospital beds was 238 and in 2018 there were 211 beds. In the same period, the number of specialty hospital beds declined from 288 to 251[5]. Bed occupancy data are unavailable, but ESLC members discussed that the majority of beds run at nearly full occupancy.

5 Senate Bill 590 (SB 590)[6], passed in the 2018 legislative session, provides needed guidance on involuntary admissions procedures, revocation procedures, and clinician liability. Training opportunities for hospitals, CMHCs, and MCRTs were identified by ESLC members.

DISCUSSION

Patient Risk

The ESLC initiated its conversations by identifying three primary types of patient risk that the ES teams encounter and respond to clinically. These three types of risk are wide-ranging, occur in a variety of settings, and require clinician availability 24x7:

1. Suicidal intent and rising rates of suicide
2. Homicidal intent
3. Ability to care for oneself.

Each of these three types of risk may be further compounded by the following six factors:

1. Substance Use Disorders (SUD)
2. Recent hospitalizations
3. History of violence
4. Conditional discharge revocations from NHH
5. Co-morbidities
6. Low severity of illness.

Clinical Process Alignment

The ESLC participants discussed the resources available in each of their communities as well as clinical process similarities and differences. Assessment and evaluation forms documentation were collected from each of the CMHC ES Directors and MCRT Directors. While there were similarities in many of the data elements collected, not all forms were the same. Each CMHC and MCRT reported having its own homegrown emergency assessment and evaluation tools, and some also incorporated standardized tools including the Patient Health Questionnaire (PHQ)[8] , the Columbia-Suicide Severity Rating Scale (C-SSRS)[9], and the Montreal Cognitive Assessment (MoCA)[10] instruments. Today there is no standard across the CMHCs for lethality assessment. All ten CMHCs reported moving to integrate the PHQ-9 into their assessment and reporting workflows.

[8] Source: Pfizer PHQ website accessed June 15, 2018, http://www.phqscreeners.com

[9] Source: Columbia website accessed June 15, 2018, http://cssrs.columbia.edu/the-columbia-scale-c-ssrs/about-the-scale

[10] Source: MoCA website accessed June 15, 2018, https://www.mocatest.org

[14] Source: NH DHHS website accessed June 1, 2018, https://www.dhhs.nh.gov/section-1115-waiver/index.htm

There is no nationally-recognized best practice for emergency assessment and evaluation documentation that the members of the ESLC could identify. *This provides both a challenge and an opportunity moving forward*. The ESLC participants had a range of opinions regarding whether all ten CMHCs could adopt the same ES assessment tool(s). It was agreed that all ten could initially adopt a consistent set of critical data elements and move towards a fully integrated assessment at a later date.

Additionally, NHHA reported that there are different medical clearance processes in place in the state's acute care hospitals; this may also be an area of opportunity for collaboration between the acute care hospitals, the CMHCs, and the MCRTs.

Quality and Outcomes

The ESLC participants discussed four areas of focus that would improve quality and outcomes for patients seen by ES personnel:

1. Reduce variability. Given the resource equity issues described in **Figures 4-5**, the ESLC participants described the need to reduce the variability in the care delivery system. This is a larger discussion about resource allocation statewide, and not one that the CMHCs, MCRTs, and DRFs will be able to address independently.
2. Outcomes measures. Currently there are no outcomes measures related to the emergency services provided. Examples of future outcomes measure topics include the counts of the types of treatment provided, treatment timeliness, follow up treatment timeliness, care coordination efforts, and the number of ED boarders. As a start, the CMHCs are currently working to be able to report by the end of FY2019 on the NQF 0104 quality measure for adult major depressive disorder suicide risk assessment, as well as implement the PHQ-9 uniformly. More investment will be needed in workflow redesign and analytics capacity to produce timely, reliable outcomes measures. There is also an expectation that the 1115 DSRIP waiver program[14] (1115 waiver) will provide resources to assist in outcomes measurement efforts.
3. Hospital boarding standards of care training. Due to the high number of patients boarding in acute care hospital emergency departments (EDs), the increasing adult patient trend, and a desire for the highest level of patient care in the ED, it is important that uniform standards of care for hospital ED personnel be developed and ED personnel be trained. This training initiative will be spearheaded by the NHHA with anticipated support from NHH and the CMHCs.
4. Involuntary Emergency Admissions (IEA) rescinding training. With the passage of SB 590 in the 2018 legislative session, there are new IEA rescinding practices for statewide adoption. NHHA, with anticipated support from NHH and the CMHCs, will need to provide training to the acute care hospitals, NHH and CMHCs.

Information Technology

Information technology (IT) plays an increasingly large role in the delivery and quality of health services. The ESLC identified and discussed barriers and opportunities related to IT as shown in **Figure 6**. If these opportunities can be realized, it is expected that patient care quality will increase, clinical decision-making will improve, patient and clinician satisfaction will increase, and administrative burdens will decrease. There is an expectation among the ESLC participants that the 1115 waiver program will improve health information exchange (HIE) and event notification services (ENS) within and across communities.

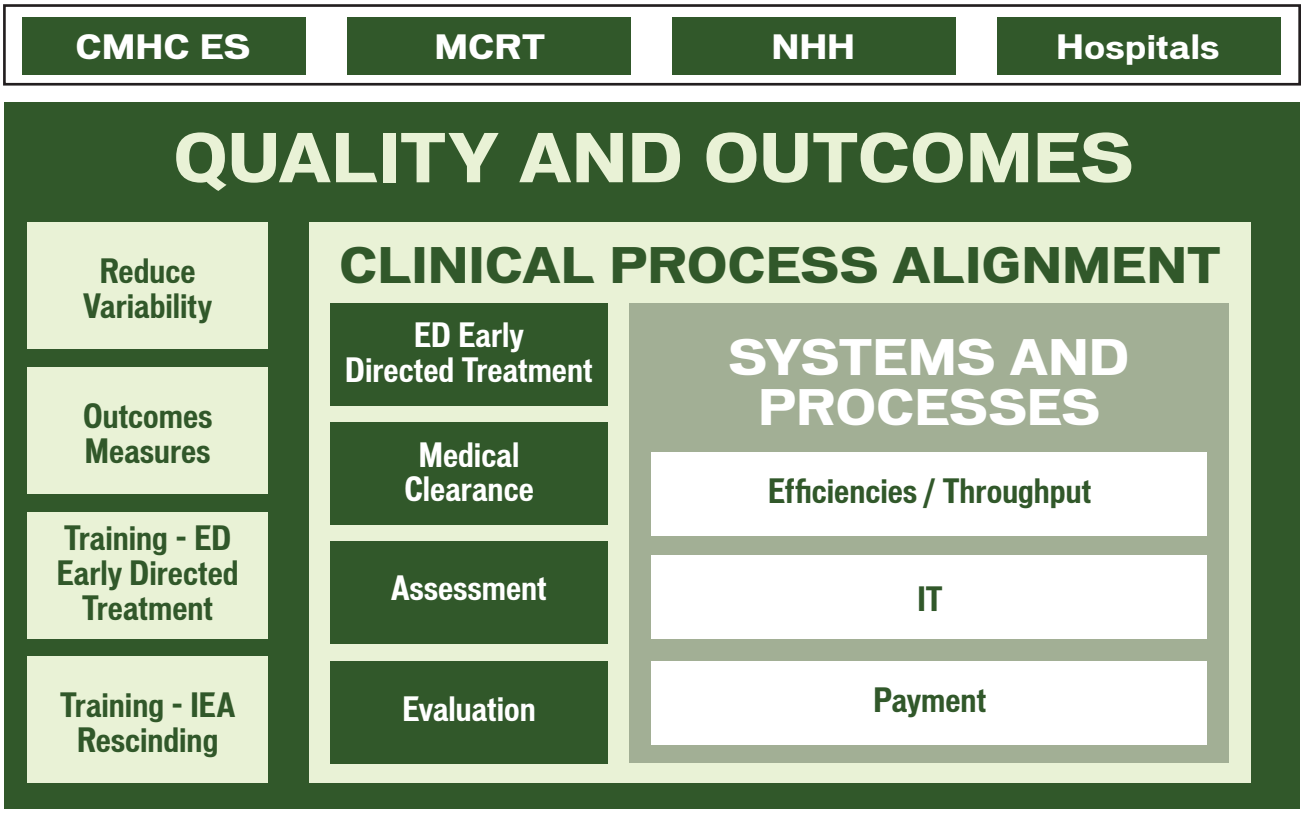
Figure 6: Identified IT Barriers and Opportunities

IT BARRIERS	IT OPPORTUNITIES
Lack of electronic HIE. The lack of HIE between providers in New Hampshire remains high. There is a desire to be able to share health records electronically in real time, both within and across communities.	**Electronic interoperability between CMHCs, DRF Facilities, NH Hospital, and Community Hospitals**. While the State's HIE, the NH Health Information Organization, discontinued its primary service offering at the end of 2017, there is still a need to be able to share health records electronically between providers.
Lag time with scanned and faxed documents. In lieu of HIE, most documents are either scanned or faxed between the CMHC ES teams and the hospitals. This typically creates a lag in information receipt which may create additional services or impact quality. There are some cases whereby the CMHC ES teams are entering data directly into a hospital's electronic health record (EHR) in order to create a "band aid" in the system.	**1115 waiver IDN CMT project for event notification services (ENS) and shared care plan**. The current 1115 waiver intends to provide ENS and shared care plan functionality across the state. These services are intended to improve patient quality of care. However, none of the ES staff involved in the ESLC were aware of how the patient care workflows were being designed under the 1115 waiver; there is an opportunity to involve these leaders going forward.
Lack of electronic, common ES assessment. The "system of care" is currently lacking a common, electronic ES assessment instrument. For CMHCs serving multiple hospitals this can result in additional workload. It also creates system inefficiency.	**Phased approach to an electronic, common ES assessment**. Initial work should consist of mapping of key fields across CMHCs and MCRTs. It will take time to update IT systems across the state to adapt to a common assessment tool, similar to Massachusetts' model.
Clinical workforce challenges. While not an IT barrier specifically, the ESLC members discussed the opportunity to leverage telepsychiatry as a way to address workforce challenges and improve patient care.	**Telepsychiatry**. It is currently being used by several CMHCs and hospitals by the ES staffs to offer faster evaluations when there are geographical or temporal challenges. There are opportunities for statewide expansion.

NEXT STEPS

The ESLC developed a process improvement framework **(Figure 7)**. As a next step, the ESLC recommends that work groups involving the CMHCs, MCRTs, NHH and the acute care hospitals be developed to address the three framework components – quality and outcomes, clinical process alignment, and systems and processes.

Figure 7: Proposed Emergency Services Process Improvement Framework



Each of the framework's three sections will require a facilitated workgroup to advance each goal and is explained as follows:

1. **Quality and Outcomes.** There is short term opportunity to conduct training in the hospital (EDs) and with CMHCs and hospitals to ensure consistent ED treatment for those patients waiting for a bed, and to ensure that SB 590's involuntary admissions procedures and revocation procedures are implemented correctly. The NHHA will take the lead in organizing this training effort with support expected from the CMHCs and MCRTs.

   Timing: Fall CY2018 for training.

   Longer term, there is opportunity to develop and implement quality outcomes measures as a process improvement mechanism to ultimately reduce variability in the system. This will be led by the CMHCs.

   Timing: Outcomes measures and variability reduction in next eighteen (18) months.

2. **Clinical Process Alignment**. Four processes were identified for which there is opportunity for system-wide clinical process alignment – ED early detected treatment, medical clearance, ES assessment, and ES evaluation. This alignment has process redesign, training, and implementation components.

   Timing. Winter 2018/19 for recommendations on updating the assessment and evaluation processes, and for a review of the updated NHH medical clearance process.

3. **Systems and Processes**. Multiple opportunities for improvement of clinical and IT processes were identified **(Figure 6)**. Changes to workflow and IT systems will need to be made in order to fully realize the clinical process alignment goals. Timing. CY2019-20 for "front end" IT changes to clinical assessment and evaluation processes. CY2019 for assessment of telemedicine opportunities to support ES.

It is expected that in the fall of 2018, three facilitated workgroups will be developed to begin the work for each of the three priority areas outlined in **Figure 7**. Additionally, the NHHA's Behavioral Health Professional Peer Group will continue to meet bimonthly with hospital staff, NHH, and DRF leadership to build on and support both the hospital and CMHC initiatives. In the fall of 2018, the NHCBHA and NHHA will develop a joint implementation and funding plan.

APPENDIX

The NHCBHA is grateful to the following participants in the ES LC.

Figure 8: ESLC Participant List

CMHC Representatives - Eve Klotz (Region 1 - Northern), Fred Hesch (Region 2 - West Central), Jennifer Jackes (Region 3 - Lakes Region), Sara Brown (Region 4 - Riverbend), Dave Tenney (Region 5 - Monadnock), Jessica Capuano (Region 6 - Nashua), Anna Pousland (Region 7 - Manchester), Dennis Walker (Region 8 - Seacoast), Keri Hills (Region 9 - Community Partners), Kerry Ali (Region 10 - CLM)
MCRT Representatives - Roy DeWinkeleer (Concord), Jessica LaChance (Manchester), Kari Sanborn (Manchester), Melbourne Moran (Nashua)
DRF Representatives - Heidi St. Hilaire (Elliot), Julie Mills (Portsmouth), Sandra Leggett (Franklin), Jennifer Conley (Cypress)
NHHA Representative - Kathy Bizarro-Thunberg
NH DHHS Representative - Elizabeth Fenner-Lukaitis
NHH Representative - Eileen Moore (Invited)
NHCBHA CEO Representative - Peter Evers (Executive Sponsor)
NHCBHA Representative - Patrick Miller (Facilitator)

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