ED Avoidance 101

Compendium of 15 tactics to expand patient access and coordinate complex care

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1. Current avoidable ED landscape

2. Tactics for reducing avoidable ED use

3. Q&A
CDC’s latest report: ED visits hit a record high

Annual U.S. emergency department visits

*National Hospital Ambulatory Medical Care Survey*

Visits in millions, 2011–2016

- 2012: 130.9
- 2013: 130.4
- 2014: 141.4
- 2015: 136.9
- 2016: 145.6

ED visits occurring after business hours:

- 59%

ED users who are publicly insured:

- 50%

Sources:
- "National Hospital Ambulatory Medical Care survey: 2016 Emergency Department Summary Tables," CDC;
- "National Hospital Ambulatory Medical Care survey: 2015 Emergency Department Summary Tables," CDC;
- "National Hospital Ambulatory Medical Care survey: 2014 Emergency Department Summary Tables," CDC;
- "National Hospital Ambulatory Medical Care survey: 2013 Emergency Department Summary Tables," CDC;
- "National Hospital Ambulatory Medical Care survey: 2012 Emergency Department Summary Tables," CDC;
- Population Health Advisor interviews and analysis.
Patient, clinical, and financial factors drive ED use

Most commonly cited reasons of avoidable ED use

<table>
<thead>
<tr>
<th>Lack of access</th>
<th>ED</th>
<th>Lack of education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>60%</td>
<td>Perceived severity</td>
</tr>
<tr>
<td></td>
<td>Of ED users stated ER was more convenient than primary care</td>
<td>Of ED users cited seriousness of their medical problem as the reason for last ED visit</td>
</tr>
<tr>
<td>Flexible payment</td>
<td>42%</td>
<td>Physician referral</td>
</tr>
<tr>
<td>Of non-urgent ED patients chose the ED because of payment flexibility (e.g., no requirement of pay at time of care)</td>
<td>Of non-urgent ED patients who presented to the ED during business hours were advised to do so by a primary care physician</td>
<td></td>
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</tbody>
</table>

Frequent users constitute outsized proportion of visits

National frequent ED user trends

5–8% of ED users ACCOUNT FOR 21–28% of ED visits

Characteristics of frequent ED users

Poor Physical Health

Indicated fair to poor physical health, compared to 12% in less frequent ED users

Utilize Mental Health Services

Used mental health services in year prior to ED visits, compared to 7% in less frequent ED users

Have Insurance

Have some form of health insurance

Rely on Other Health Services

Reported an outpatient clinic as their main source of health care services

1) Defined as having 4 or more ED visits per year.
2) Frequent ED user calculations aggregate survey results for the "4-9 ED Visits" and "≥10 ED Visits" categories. Less frequent ED user calculations aggregate survey results for the "0 ED Visits" and "1-3 ED Visits" categories.
3) Centers for Disease Control defines a BMI of 30 or higher as obese. Healthy BMI range considered 18 to <25 kg/m².

Effective management reduces ED visits and costs

Emergency department and urgent care facility utilization¹

Visits per 1,000 patients; 2014

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Urgent Care</th>
<th>Emergency Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loosely managed</td>
<td>85</td>
<td>157</td>
</tr>
<tr>
<td>Well managed</td>
<td>62</td>
<td>96</td>
</tr>
</tbody>
</table>

Avoidable Cost Opportunity in ED

$9.72 PMPM² difference on ED spend between loosely- and well-managed benchmarks¹ for Medicaid patients (2014)  

$4.4B Cost savings nationwide by increasing urgent care and retail clinic access for patients with nonemergency conditions

1) Loosely managed utilization levels are representative of plans with some utilization review, preauthorization, and case management. Well-managed values represent nationwide claims cost and utilization targets in a managed care environment, such as a staff model health maintenance organization (HMO) or a globally capitated provider group, which effectively applies utilization management principles across the entire continuum of medical care.

2) Per member per month.

Majority of ED visits considered avoidable

Added pressure from payers to better manage these visits

Breakdown of ED Visits by Severity

*Medicare patients, Q4 2017-Q3 2018*

- **Non-preventable**
  - Emergent but preventable: 13%
  - Primary Care Treatable: 32%
- **Non-emergent**
  - 26%

No-Pay Policy Spreading for Non-Emergent ED Use

Anthem Blue Cross and Blue Shield (BCBS), nation’s second-largest health insurer, stopped reimbursing non-emergent ED visits across four states: Kentucky, Missouri, New York, and Georgia.

“If Anthem is able to show reduced inappropriate ED use, plans are hungry for more tactical solutions than they have in this area”

*Rachel Sokol, Practice Manager, Health Plan Advisory Council*

A comprehensive strategy to reduce avoidable ED use

Level of resource intensity varies based on patient population targeted

**Objective 1:**
Increase patient access to low-acuity care
- Expand access opportunities in primary care
- Maximize convenient care access points

**Objective 2:**
Inform and encourage appropriate use of health services
- Leverage opportunities to educate patients
- Tailor patient outreach for optimal engagement

**Objective 3:**
Design targeted measures for complex frequent users
- Coordinate care for frequent ED users
- Build partnerships with post-acute care facilities to reduce avoidable visits

Source: Population Health Advisor interviews and analysis.
Roadmap of ED avoidance tactics

**ED Avoidance Strategies**

*Tactics ranked according to level of investment needed and time necessary for implementation*

<table>
<thead>
<tr>
<th>Rank</th>
<th>ED Avoidance Tactics</th>
<th>Page #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Create visual aids to guide care plan discussions with newly diagnosed patients</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Assign new patients through centralized call center to balance provider panels</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Organize shared medical appointments</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Proactively connect unassigned patients to PCPs</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Engage in “teach-back” after inappropriate ED use</td>
<td>21</td>
</tr>
<tr>
<td>6</td>
<td>Increase collaboration with post-acute care partners to identify the causes of avoidable ED visits</td>
<td>30</td>
</tr>
<tr>
<td>7</td>
<td>Optimize websites and mobile applications to direct patients to proper care sites</td>
<td>23-24</td>
</tr>
<tr>
<td>8</td>
<td>Send targeted mailings to frequent ED users</td>
<td>22</td>
</tr>
<tr>
<td>9</td>
<td>Use the Patient Activation Measure assessment to determine appropriate communication method</td>
<td>19</td>
</tr>
<tr>
<td>10</td>
<td>Provide patients with 24/7 phone access to care team members to support execution of new care plans</td>
<td>16, 25</td>
</tr>
<tr>
<td>11</td>
<td>Identify and treat patients with mental/behavioral health needs in the primary care setting</td>
<td>27</td>
</tr>
<tr>
<td>12</td>
<td>Implement ED-based care navigation to identify frequent users and connect them with medical homes</td>
<td>28-29</td>
</tr>
<tr>
<td>13</td>
<td>Develop telehealth strategy to efficiently increase access to PCP level of care</td>
<td>17</td>
</tr>
<tr>
<td>14</td>
<td>Train local paramedics to identify primary care treatable conditions in the community, provide basic care services, and connect patients with primary care</td>
<td>32</td>
</tr>
<tr>
<td>15</td>
<td>Perform post-discharge home visits to ensure patient stability and access to primary care</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Population Health Advisor interviews and analysis.
1. Current avoidable ED landscape
2. Tactics for reducing avoidable ED use
3. Q&A
Objective 1: Increase patient access to low-acuity care

Pursue consumer-focused strategies to expand access

Low-cost opportunities in both traditional and virtual care sites

Consumer-focused strategies to expand access to care

1. Expand access opportunities at traditional sites

   - Assign new patients through centralized call center to balance provider panels
   - Proactively connect unassigned patients to PCPs
   - Organize shared medical appointments

2. Maximize convenient care Access points

   - Provide patients with 24/7 phone access to care team members to support execution of new care plans and answer questions
   - Develop telehealth strategy to efficiently increase access to PCP level of care

Source: Population Health Advisor interviews and analysis.
Telephonic entry point facilitates appointments

Call center ensures PCP caseloads are evenly distributed across system

Canary Health Care¹ Welcome Center sends new patients to providers with capacity

Call center operations
- **Operating hours**: 7am–6pm, Monday–Friday
- **Staffing**: 2.3 FTEs
- **Volume of requests**
  - Calls: 50–85 per day
  - Online forms: 15–20 per day
- **Wait times**: 5 minutes or less, on average
- **Functionality**:
  - Schedule primary care appointments for new patients based on patient preferences, provider gender, and provider location
  - Complete patient registration, capturing insurance and demographic information, provide an activation code for access to the secure patient portal, and send a follow-up “welcome email” to the patient

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¹ Pseudonym.

Source: Population Health Advisor interviews and analysis.
Canary Health Care

- A multi-hospital system located in the South with a robust ambulatory network of over 30 primary care clinics and 120 specialty practices

- Created the “Welcome Center” in November 2013 as a single telephonic access point for new patients and to connect unassigned patients to a PCP post-discharge to reduce readmissions

- Welcome Center staff have access to the PCPs’ calendars and panel sizes to ensure new/unconnected patients receive appointments with newer PCPs who have excess capacity

1) Pseudonym.
Proactively direct unassigned patients to pcps

Highlight key features like same-day appointments

Targeting existing patients with custom URLs at Henry Ford Health System

Direct email contains patient-specific URL and promotes call center line

- Past ED patients
- Young adults transitioning from pediatrics

URLs link to custom pages with tailored content based on risk-level and also link to appointment scheduling

Source: Population Health Advisor interviews and analysis.
Henry Ford Health System

- Ambulatory network that includes urgent care, retail clinics, and worksite clinics in Metro Detroit, Michigan

- Found that approximately 50% of urgent care patients were not attached to Henry Ford PCP
- Developed a customer relationship management campaign to target select groups of unattached patients from across system and direct them to a PCP
Group visits increase capacity and self-management

Model allows practices to tailor visits to subgroups of patients

Use of group visits by family physicians

- Family physicians offering group visits: 91.6%
- Family physicians not offering group visits: 8.4%

Patient receptivity to group visits

- Patients would decline to participate: 40%
- Patients would accept enthusiastically: 40%
- Patients would defer or agree with encouragement: 20%

Range of shared resources at Group Health

- Online diabetes community
- Weekly asthma classes
- Monthly classes on preventative health

Proven success from diabetes group visit pilot

- Fewer ED visits compared to non-participants: 50%
- Fewer specialty visits per year: 24%

Group Health Cooperative

• Health plan and care delivery system based in Seattle, Washington; provides coverage and care to over 600,000 members in Washington state and Northern Idaho

► Offers group visits on a decentralized basis
► Doctors at individual practices decide what courses to offer based on demand, availability
Phone line allows immediate access to care team

The first two weeks of self-management require the most support

Key lessons of Le Bonheur Children’s Service

- Rearrange existing staff to accommodate calls
- Educate patients on appropriate times to seek help
- Design easy-to-follow algorithms for care team
- Patients seek guidance most often in the first two weeks after diagnosis

439
ED visits avoided by diabetes program over two years

$760,000
Estimated cost savings after two years

Le Bonheur Children’s Hospital

- 255-bed hospital located in Memphis, Tennessee

- Implemented a 24/7 phone service for caregivers of children with diabetes and asthma
- Clinically-trained operators, hired internally had served as nurses, paramedics, direct transport personnel, etc.; physicians develop protocols used for management
- On average, 1-2 calls to service per day; each call lasts on average 20 minutes
## Telehealth increases access for dispersed population

Targeted options reduce cost for at-risk populations, attract new patients

Expanding from covered populations to the general public

<table>
<thead>
<tr>
<th>Service Substitution</th>
<th>Extended Access</th>
<th>New Service Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employee base</strong> “Franciscan Anytime”</td>
<td><strong>Current patients</strong> “Franciscan After-Hours”</td>
<td><strong>General population</strong> “Franciscan Virtual Urgent Care”</td>
</tr>
</tbody>
</table>

- Improve employee’s access to reduce costs (avoidable ED visits, treatment delays)
- Extend availability of care for established patients through after-hours service
- Provide care on the patient’s terms to attract new volumes, extend Franciscan brand reach

### Extended Access

- **Patient Cost**
  - $19–$35 per virtual visit
  - $85–$90 for home visits
  - Free telephonic care

### New Service Provision

- **Patient Cost**
  - $35 per virtual visit

### Service Substitution

- **Patient Cost**
  - $35 per virtual visit

### Cost savings

- $400K

Cost savings from preventing self-insured patients from visiting the ED

Source: Population Health Advisor interviews and analysis.
Franciscan Health

- Seven-hospital integrated delivery system based in Tacoma, Washington

- Partnered with Carena, Inc. in 2010 to expand access to care through virtual visits and house calls

- Employee-based telehealth program “Franciscan Anytime” achieved $400K in cost savings from preventing self-insured patients from visiting the ED
Virtual care can deflect low-acuity demand

Online questionnaire maximizes PCP time

How Brigham and Women’s Hospital (BWH) uses virtual care for low-acuity issues

- Patient at BWH enrolled in program
- Patient experiences acute issue
- Patient fills out questionnaire
- Doctor receives email to review questionnaire answers
- Doctor diagnoses and initiates next steps remotely
- Doctor is paid per email
- Patient receives care without presenting in person

Brigham and Women’s Hospital
• 763-bed hospital located in Boston, US

► To improve patient access and ED use for low-acuity issues, Brigham and Women’s Hospital (BWH) implemented “E-Visits”, an online questionnaire available through BWH’s patient portal

► E-Visits are available on-demand to patients, and questionnaire results are sent to the patient’s doctor, who then reviews the questionnaire answers and provides a treatment plan for the patient (or instructs the patient to seek care in person if necessary); for low-acuity issues, patient receives care entirely virtually

► E-Visits, when used for low-acuity cases, require significantly less time from both the patient and provider (e.g., visit for a cough takes 15 minutes in-person vs. under 5 minutes as an E-Visit)
When telling your patients “I told you so” works

Post-discharge text messages build awareness of available options

Patient portal +Salud directs patients away from ED, before and after visit

<table>
<thead>
<tr>
<th>Advertises current average wait times</th>
<th>Sends post-discharge text message</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:17:42</td>
<td>ED</td>
</tr>
</tbody>
</table>

Case in Brief: Hospital de Torrevieja

- 269-bed hospital, part of Ribera Salud, a public-private health care organization operating six sites in Valencia and Madrid, Spain
- An updated wait time patient portal, +Salud, displays wait times for all care settings helping patients choose most convenient option
- Automated text messages notify patients of time would have saved at convenient care options rather than ED visit

+Salud addresses ED misuse

37%
Decrease in “non-urgent” ED presentations after implementation

Source: Population Health Advisor interviews and analysis.
Inflect behavior change to maximize financial impact

Tailor education efforts

- Determine appropriate communication method
- Create visual aids to guide care plan discussions with newly diagnosed patients

Provide targeted communications

- Engage in “teach-back” after inappropriate ED use
- Send targeted mailings to frequent ED users

Maximize outreach

- Optimize websites and mobile applications to direct patients to proper care sites
- Offer in-the-moment support

Increasing number of patients impacted

Source: Population Health Advisor interviews and analysis.
Stratify care planning based on patient activation

Goal to improve outcomes by tailoring support to patients

Overview of Patient Activation Measure survey

- 13-question survey to assess patient understanding of condition, care plan
- Researchers found that for every ten point increase on the survey, patients were less likely to smoke, suffer from obesity, and visit the ED
- Hospital and clinics use survey to tailor communication and post-discharge care management plan according to patient activation levels

Patient activation levels

- **Level 1**: Patient does not feel confident to be an active participant in their care
- **Level 2**: Patient lacks understanding of their health status and regimen
- **Level 3**: Patient begins to take an active role in their care and understands basics about their health
- **Level 4**: Patient is able to adopt and maintain new health behaviors over the long term

Fairview Health Services

- Nine-hospital health system based in Minneapolis, Minnesota

- Patient Activation Measure (PAM) developed by University of Oregon researchers asks 13 questions to assess a patient’s level of activation

- Since 2009, Fairview physician clinics have administered the PAM survey; Fairview uses the survey data to better engage patients and design patient care plans post-discharge that are tailored to the patient’s PAM score
Visual aids support patient self-management

Avoid overwhelming newly diagnosed patients in the primary care visit

Diabetes one-pager: Conversation focal point for health coach and patient

**Diabetes Zones**

**GREEN ZONE: ALL CLEAR**

*If:*
- Most fasting blood sugars are under 130.
- Average blood sugars 2 hours after meals are under 140.
- No episodes of hypoglycemia.
- HbA1c is < 7%.

*Then:*
- Your blood sugars are under control.
- Continue taking your diabetes medications, and doing home glucose testing.
- Follow healthy eating habits and activity goals.
- See your health care provider/diabetes educator every 3–6 months.

**YELLOW ZONE: Caution**

*Work closely with your health care team if you are in the yellow zone.*

*If:*
- Most fasting blood sugars are 130–180.
- Average blood sugars 2 hours after meals are 180–240.
- Hypoglycemia reactions are occurring 1–2 times a week.

*Then:*
- You may need a medication adjustment.
- Improve your eating habits.
- Increase your activity level.
- If after one week there is no improvement in blood sugars, call your physician or diabetes educator.

**RED ZONE: Danger**

*Contact your health care team if you are in the red zone.*

*If:*
- If most fasting blood sugars are 180 or more.
- If average blood sugars 2 hours after meals are 240 or more.
- If hypoglycemia reactions are occurring more than 2 times a week.

*Then:*
- You may need a medication adjustment.
- Improve your eating habits.
- Increase your activity level.
- Call your health care provider immediately.

Information remembered correctly

14% When presented verbally

80% When presented verbally and with a visual aid

Bellin Health Care System

• 167-bed hospital located in Green Bay, WI

▶ Activated Consumers one of six drivers for population health strategy; focus on both activation in clinical settings and beyond the walls of the health system

▶ Patient education materials vetted by Patient Workgroup to ensure clear information
Teach-back education

Teach-back promotes awareness of alternative sites

Educate patients after inappropriate ED utilization

Care manager outreach aims to prevent avoidable ED visits

Care manager receives list of established patients presenting to ED or hospital previous day

Care managers contact patients for follow-up; if ED visit was inappropriate, care manager provides education on availability of alternate care points

Care manager encourages patient to teach back key concepts, information to confirm understanding

Source: Population Health Advisor interviews and analysis.
North Shore Physicians Group

- 200-physician medical group located in eastern Massachusetts

- Established patients contacted for follow-up post-discharge; care managers target inappropriate ED utilizers for education about appropriate sites of care

- Educates these patients about availability of evening, weekend clinic hours
Targeted mailings

Target outreach to educate patients about care options

Direct mail campaign used to promote primary care to ED frequent flyers

Risk factors inform mailings at Grigg Health¹

Tracks patients who have inappropriately utilized ED

Uses scoring algorithm based on factors like basic demographics, household type, and health history to determine patient likelihood of needing and utilizing services

Creates targeted recipient list for direct mail campaigns promoting urgent care and primary care

Source: Population Health Advisor interviews and analysis.
Grigg Health\(^1\)

- Multi-hospital health system based in the Midwest; ambulatory network includes urgent care centers

- To make the most of marketing resources for primary care and urgent care, targets populations using scoring algorithm based on patient demographics and risk factors

- Patients who inappropriately utilized the ED then receive tailored instructions suited to fit both the reason for their visit and their future needs

1) Pseudonym.
Nurse triage line guides patient utilization decision

RN triage line operations

- **Operating Hours**
  - 24 hours per day, 7 days per week

- **Staffing**
  - Day: 2 RN FTEs
  - Evening: 3.5 RN FTEs
  - Overnight: 1 RN FTE

- **Call Volume**
  - 200 calls per day

RN triage line methodology

<table>
<thead>
<tr>
<th>Emergent needs</th>
<th>Non-emergent needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>80%</td>
</tr>
</tbody>
</table>

- **Emergent needs**
  - Recommend ED visit

- **Non-emergent needs**
  - Make urgent care appointment (Within 8 hours)
  - Make primary care appointment (Within 48 hours)
  - Provide home remedy

Decreasing acuity of caller’s ailment

Source: Population Health Advisor interviews and analysis.
Ochsner Health System

- An integrated health care system located in Louisiana with 9 hospitals, 2 urgent care facilities, and over 30 primary care clinics

- Developed “Ochsner On Call” to provide telephonic advice to all patients who call, regardless of health network or payer affiliation

- With an average call volume of 200 patients per day, 80% of calls are deemed non-emergent
Accessible text-first platform reduces readmissions

Introduced during inpatient stay, program resolves patient concerns virtually

**Patients at-risk of readmission receive guidance via text**

- Overwhelmed by discharge information
- Knowledge gaps manifest at home
- Inability to gauge severity of situation or determine next steps

**Patient texts ED physician**

- Physician median response time is two minutes
- Visit can include text message, image sharing, voice, or video conferencing and usually last around 37 minutes

**Concern resolved virtually**

- 85% Issues resolved entirely virtually
- 50% Patients would have gone to ED without intervention

Source: Muller M, “Safe Transitions: Telemedicine access to EM physicians following ED discharge”, Emergency Medical Consultants Ltd; Global Forum for Health Care Innovators interviews and analysis.
Optimize online access points to direct patients to care

Single website simplifies access and care setting selection

HealthPartners “Call, Click, Come In” home page

Outlines which conditions can be treated at each location

**CareLine℠ or Clinic Nurse**

Unsure what to do? Get advice and treatment for some conditions from a nurse 24/7 by calling 612-339-3663. Or call your clinic nurse during normal hours. [Click here for common conditions](#)

Free

**Scheduled Phone Visit**

As a HealthPartners clinic patient, you can speak with your doctor by scheduling a phone call in advance. [Click here for common conditions](#)

Co-pay or starting at $55

Schedule online  Go >
Call your clinic  Go >

**Call**

Talk to your doctor or a nurse.

**Click**

Get care online or via email.

**Come In**

Visit your doctor or a clinic.

Includes price

Provides relevant links—to online scheduling, hours, locations, etc.

Source: Population Health Advisor interviews and analysis.
HealthPartners

- Integrated health care system based in Minneapolis, Minnesota; ambulatory network includes primary care practices, urgent care, virtual care, phone visits, and email visits

- Developed comprehensive selection of primary care access points, including a nurse call line, scheduled in-person visits with nurses and physicians at a clinic or urgent care, and remote visits via telephone, email, and telemedicine

- To help patients navigate to appropriate sites, launched a marketing campaign to help patients easily determine the type and level of care appropriate for their condition
Symptom checker educates patients on symptoms

Home page assesses patient inputs and links to resources

UT San Antonio offers medically validated Isabel Symptom Checker tool

Patients enter symptoms by writing free text or using drop-down bar.

Links send patient to educational materials.

Clarifying questions help determine most appropriate site of care, without forcing self-diagnosis.

Source: Population Health Advisor interviews and analysis.
Clear next steps direct patients to appropriate care

Customizing location options drives in-network utilization

1. Clarify symptom acuity
   Sample Isabel Symptom Checker questions
   1. How have your symptoms changed over the last few hours/days?
   2. How much pain or discomfort are you in?
   3. How are your symptoms affecting your daily activities?
   4. Do you have any other serious, long-term conditions (e.g., diabetes, cancer)?

2. Recommend site of care
   Dashboard illustrates urgency and needed intensity of care:
   Where to now?
   - Green: UT Health Primary Care
   - Yellow: Immediate Care Locations
   - Red: Emergency, Dial 911

3. Provide in-network options
   Directs patient to use UT Health services:

Source: Population Health Advisor interviews and analysis.
University of Texas, San Antonio

- 617-bed hospital located in San Antonio, Texas

- Partnered with Isabel Healthcare to embed medically validated Isabel Symptom Checker tool onto website home page

- Educates patients about possible diagnoses and determines appropriate site of care given patient’s symptoms and acuity

- Patients use symptom checker about 200 times per month
Targeted tactics address needs of frequent ED users

**Integrated behavioral health models**
Identify and treat patients with mental/behavioral health needs in the primary care setting to prevent avoidable ED use by this population.

**Care navigation**
Identify frequent users and connect them with medical homes, community resources, for longitudinal management.

**Specialized care for high-need patients**
Dedicate staff and purpose-built space for underserved patients with unique needs.

**PAC' partner collaboration**
Collaborate with PAC partners to identify the causes of avoidable ED visits and make strategic changes to reduce avoidable visits from this patient population.

**EMS triage**
Train paramedics to identify primary care-treatable conditions in the community, provide basic care services, and connect patients with primary care.

**Post-discharge home visits**
Provide moderate and high risk patients with post-discharge home visits to prevent avoidable readmissions.

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1) Post-acute care.

Source: Population Health Advisor interviews and analysis.
PCPs can actively identify behavioral health needs

Treatment cascade involves each team member in behavioral health care

Sample triage pathway for depression care at Intermountain

**Routine care**
- Appropriate for mild depression
- Managed by PCP and support staff, connected to family, social, and community support

**Collaborative care**
- Appropriate for moderate depression, co-morbid conditions
- Ongoing CM support, option for brief management-focused therapy with mental health staff

**Specialty care referral**
- Appropriate for danger risk, relational burden, co-morbid complexity
- Specialist consults on stabilization or refers to secondary services

Intermountain HealthCare

- Nonprofit system of 22-hospitals, a medical group spanning 185 physician clinics, and a health insurance company

- Developed mental health integration model (MHI) in 1998 to better care for patients who presented in the primary care setting with underlying behavioral health conditions

- Newly diagnosed depression patients seen in MHI clinics were 54% less likely to present in the ED than depressed patients from clinics providing usual care
ED-based navigators link to timely follow-up care

Navigator flags appropriate care transitions staff based on medical and psychosocial risk

**Navigator**
- Conducts SDOH screening for all high-risk patients and those in need of follow-up care
- Addresses barriers (e.g., coordinates appointments, transportation)
- Initiates automatic referral to appropriate transitions staff

**Care transitions team**

**Nurse care manager**
- Educates patient about chronic diseases and discharge planning
- Ensures safe transition by coordinating durable medical equipment, post-acute care, and support services

**Social worker**
- Addresses social and behavioral health needs
- Begins brief behavioral health intervention (e.g., medication-assisted treatment) and navigates community resources

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90%

Medicaid patient compliance rate for primary and specialty care follow-up appointments

Related Resource: **Expanding the Role of Patient Navigation in the Emergency Department**

Outlines common ED-based roles designed to improve patient care coordination and provide targeted support for higher-risk patients

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1) UCH upskilled college students to serve as scribes and navigators.
2) Social determinants of health.

Source: Population Health Advisor interviews and analysis.
University of Colorado Hospital

- 655-bed teaching hospital part of UCHealth System in Aurora, Colorado

► The University of Colorado Hospital’s (UCH) redesigned emergency department services to overcome significant inefficiencies

► Part of the redesign was the creation of a dedicated ED-based care management team (i.e., navigators, nurse care managers, social workers) to improve care transitions between the ED and ongoing clinical and non-clinical support (e.g., social services, PCP, skilled nursing facility)

► The navigator performs social determinants of health screens for high-risk patients; The nurse care manager offers education on home supportive services and coordination for medically complex patients; Separately, the social worker manages behavioral health and non-clinical needs for psychosocially complex patients; Transitions staff make referrals to community partnerships for personalized post-discharge support

► Since implementing this model, nearly all Medicaid patients attend follow-up appointments scheduled prior to discharge
Redirect psychiatric crises to specialized unit

Staff sharing ensures co-located Access Center cost-efficient

### Before: Surge in psychiatric crises

- **33%** Increase in psychiatric crises 2012-2017

### Now: Access Center triages and treats psychiatric needs

- **75%** Access Center patients with mood disorder and suicidal ideation
- **47%** Admission rate
- **50%** Decrease in psychiatric crises in ED after one year

### Intermountain Access Center staffing model

- **Dedicated staffing**
  - Patient liaison staff the Access Center
- **Shared staffing**
  - Crisis workers\(^1\) with ED
  - Psychiatrists, RNs, and techs\(^2\) with IP unit
- **Flexed staffing**
  - Physicians on-call in ED

### Access Center

- Cost of an ED visit \(~1/3\)
Intermountain HealthCare McKay-Dee Hospital

- Nonprofit clinically integrated network of 22 hospitals, a medical group spanning 185 physician clinics, and a health insurance company

- Intermountain’s McKay-Dee Hospital in Ogden, Utah, saw a 33% increase in the number of patients evaluated for a behavioral health crisis between 2012 and 2017, mostly in the busy ED.

- In April 2017, the hospital opened a Behavioral Health Access Center next to the ED to provide crisis treatment and triage patients to inpatient unit when needed.

- Within one year, half of ED patients treated for behavioral health used the Access Center instead.

- Intermountain has expanded the model, adding two additional Access Centers at other hospitals.
Dedicate space and specialized staff for geriatric ED

Standard ED experience

1. 75-year old female, living alone presents to ED for ankle injury
2. Low-acuity triage
3. Receives x-ray and ACE bandage
4. Patient discharged

St. Joseph’s geriatric ED experience for patients 65+

1. 75-year old female, living alone, presents to ED for ankle injury
2. Triage to GED
3. Trained geriatric physician evaluates patient within 15 minutes
4. GED team conducts comprehensive geriatric assessment
5. Receives x-ray and ACE bandage
6. Team briefs doctor on assessment findings and flag medications concerns
7. Patient discharged with supplemental needs ordered
8. Receives follow-up call next day

Unscheduled ED returns

95%
Drop rate of unscheduled patients returning within 30 days for same illness or injury

Inpatient admissions

24%
Decline in inpatient admissions through the ED

Source: Population Health Advisor interviews and analysis.

1) Geriatric Emergency Department.
St. Joseph’s University Medical Center

- 114-bed hospital
- Located in Paterson, New Jersey

- To improve geriatric care in the ED, St. Joseph’s developed the Geriatric Emergency Department (GED), consisting of two dedicated, 10-bed, geriatric ED units
- The GED is staffed with 12 specialized clinicians including physicians, nurses, and support staff. Geriatric patients admitted to the GED receive comprehensive geriatric assessments and specialized support, such as palliative care consults
- Since the geriatric ED opened in 2009, inpatient admissions decreased 24% (from 54% to 30%) and have consistently scored high in patient satisfaction, with virtually zero complaints from patients

Source: St. Joseph’s University Medical Center, Paterson, New Jersey; Physician Executive Council interviews and analysis.
Form SNF-ED partnerships to reduce readmissions

Joint operating committee discussions lead to ED visit reductions

Detroit Medical Center connects infusion services directly with PAC

**Status Quo**

Unable to directly access infusion services, PAC provider sends patient to ED, resulting in a readmission

**New Ancillary Services Arrangement**

PAC provider given priority access to infusion services so patients can bypass the ED, avoiding a readmission

Source: Population Health Advisor interviews and analysis.
Detroit Medical Center

- Non-profit, nine-hospital academic health system located in Detroit, Michigan

- Joint operating committee discussions uncovered difficulty post-acute care providers faced accessing hospital-based ancillary services for PAC patients, leading to avoidable readmissions

- Recently added representatives from ancillary areas, such as radiology, infusion clinics, and vascular labs to joint operating committee membership

- PAC providers now have direct access to these services, bypassing the ED
### Dyad conducts home visits for high-risk patients

**CHW** and RN address clinical and psychosocial needs in rural service area.

#### Kalispell relies on CHW to extend RN reach for post-discharge support

<table>
<thead>
<tr>
<th>Identify patients with clinical and psychosocial needs</th>
<th>Coordinate primary care and initiate home care</th>
<th>Extend capacity through home tele-visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>- RN and CHW meet patient during admission to enroll and build rapport</td>
<td>- Both attend the initial home visit to perform clinical and social needs assessments</td>
<td>- CHW performs additional home visits as needed to address patient’s non-clinical needs</td>
</tr>
<tr>
<td>- Dyad targets patients with 3+ inpatient visits over 5 months</td>
<td>- Team debriefs and creates care plans with defined next steps</td>
<td>- CHW facilitates tele-visit with RN over an iPad to assess clinical status</td>
</tr>
<tr>
<td></td>
<td>- RN attends first PCP visit one to two weeks post-discharge</td>
<td>- CHW touches base with patient weekly to check on progress</td>
</tr>
</tbody>
</table>

#### Data measured six months after intervention start date.

- **58%** Reduced inpatient admissions
- **30%** Reduced observation hospital visits
- **31%** Reduced emergency department visits

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1) Community health worker.
2) Data measured six months after intervention start date.

Source: Population Health Advisor interviews and analysis.
Kalispell Regional Medical Center

- 138-bed rural hospital in Kalispell, Montana

► Kalispell Regional Medical Center employs a CHW in a dyad with an RN navigator

► The team, called the Complex Care Team, provides 30 to 90-day post-discharge support for rural, at-risk patients with clinical and psychosocial needs

► The CHW increases the RN’s capacity by using weekly check-ins and home visits to assess and meet patients’ clinical needs; During home visits, the CHW uses an iPad for a tele-visit with the RN to limit RN travel time to remote locations

► The Complex Care Team has reduced inpatient visits by 57%, observation visits by 30%, and ED visits by 31%¹

¹) Data measured six months after intervention start date.
Deploy paramedics to triage patients in community

High-utilizer follow-up visits and transport to low-acuity sites yield savings

Trained community health paramedics use 2-pronged approach to reduce avoidable ED utilization

Receive 200 hours of additional training

Post-discharge community paramedicine visits

Visit frequent ED utilizer patients 2–3 times per week for 30-days post-discharge to improve care plan adherence and provide additional support

$1.6M Cost savings

Alternate destination transportation

Divert non-emergency patients to alternate destinations (e.g., urgent care centers, clinics, mental health hospital, substance abuse facility)

$2M Cost savings

Source: Population Health Advisor interviews and analysis
Regional Emergency Medical Services Authority (REMSA)

- Nonprofit EMS organization based in Reno, Nevada, that serves as the exclusive ground and helicopter ambulance provider for Washoe County. REMSA works with local fire departments and four area medical centers.

- Leveraged existing partnerships with the University of Nevada-Reno School of Community Health Sciences, Washoe County Health District, State of Nevada Office of EMS, and local hospital systems to implement community health programs: ambulance transport alternatives and community paramedic home visits.
Roadmap of ED avoidance tactics

ED Avoidance Strategies

*Tactics ranked according to level of investment needed and time necessary for implementation*

<table>
<thead>
<tr>
<th>Rank</th>
<th>ED Avoidance Tactics</th>
<th>Page #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Create visual aids to guide care plan discussions with newly diagnosed patients</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Assign new patients through centralized call center to balance provider panels</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Organize shared medical appointments</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Proactively connect unassigned patients to PCPs</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Engage in “teach-back” after inappropriate ED use</td>
<td>21</td>
</tr>
<tr>
<td>6</td>
<td>Increase collaboration with post-acute care partners to identify the causes of avoidable ED visits</td>
<td>30</td>
</tr>
<tr>
<td>7</td>
<td>Optimize websites and mobile applications to direct patients to proper care sites</td>
<td>23-24</td>
</tr>
<tr>
<td>8</td>
<td>Send targeted mailings to frequent ED users</td>
<td>22</td>
</tr>
<tr>
<td>9</td>
<td>Use the Patient Activation Measure assessment to determine appropriate communication method</td>
<td>19</td>
</tr>
<tr>
<td>10</td>
<td>Provide patients with 24/7 phone access to care team members to support execution of new care plans</td>
<td>16, 25</td>
</tr>
<tr>
<td>11</td>
<td>Identify and treat patients with mental/behavioral health needs in the primary care setting</td>
<td>27</td>
</tr>
<tr>
<td>12</td>
<td>Implement ED-based care navigation to identify frequent users and connect them with medical homes</td>
<td>28-29</td>
</tr>
<tr>
<td>13</td>
<td>Develop telehealth strategy to efficiently increase access to PCP level of care</td>
<td>17</td>
</tr>
<tr>
<td>14</td>
<td>Train local paramedics to identify primary care treatable conditions in the community, provide basic care services, and connect patients with primary care</td>
<td>32</td>
</tr>
<tr>
<td>15</td>
<td>Perform post-discharge home visits to ensure patient stability and access to primary care</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Population Health Advisor interviews and analysis.
1. Current avoidable ED landscape

2. Tactics for reducing avoidable ED use

3. Q&A
Population health 101

Webconference series

ED AVOIDANCE 101
May 22, 2019 at 1pm ET
Most ED visits aren't actually necessary—leaving patients and provider facing needless medical costs. Kick off our series with this introductory review of how you can identify and capitalize on your organization's opportunities to cut avoidable ED visits.

HEALTH EQUITY 101
June 4, 2019 at 1pm ET
Providers often find it challenging to pinpoint the areas of health inequity in their community that need the most attention. Here's how to better identify strategic priorities and improve outcomes for at-risk patients. More

CARE MANAGEMENT 101
May 29 at 2019 at 1pm ET
In the second installment of our "Population Health 101" webconference series, join us for an introductory review of the five key attributes of effective care management organizations—from patient recruitment to graduation. More

SOCIAL DETERMINANTS OF HEALTH 101
June 13, 2019 at 1pm ET
To effectively manage your patients' care, it's not enough to ask care teams to address their social needs; you also must team up with community-based organizations to provide non-clinical support. Here's how. More

Source: Population Health Advisor interviews and analysis.
A comprehensive strategy to reduce avoidable ED use

Level of resource intensity varies based on patient population targeted

**Objective 1:**
Increase patient access to low-acuity care

- Expand access opportunities in primary care
- Maximize convenient care access points

**Objective 2:**
Inform and encourage appropriate use of health services

- Leverage opportunities to educate patients
- Tailor patient outreach for optimal engagement

**Objective 3:**
Design targeted measures for complex frequent users

- Coordinate care for frequent ED users
- Build partnerships with post-acute care facilities to reduce avoidable visits

Source: Population Health Advisor interviews and analysis.
Population Health Advisor

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