Identifying Super Utilizers

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What does a Medicaid "Super-Utilizer" look like?

Top 10 most frequent ED utilizers in WA State in past 15 months:

- 1. ED visits in past 15 months range from 78 to 134
- 2. IP admissions range from 0 to 22 (average of 7)
- 3. 9 out of 10 have an indication of a current substance abuse problem
- 4. 10 of 10 have an indication of mental illness
- 5. 2 of 10 are currently homeless
- 6. 3 of 10 are currently or have recently been living in a group care setting
- 7. 1 of 10 is currently receiving in-home personal care





Patient number 10

- 54-year-old male on SSI
- Currently homeless following release from jail 12 months ago
- Applied for personal care but never received assistance
- In the personal care assessment process, reported losing recently losing section 8 housing assistance
- 78 ED visits and 1 IP admission in past 15 months
- Co-occurring SMI and substance abuse
- Most recent ED visits have been to treat problems with a catheter and chronic UTI



Patient number 10: "Super Utilizer" risk profile

Disease Category	Most recent Drug or Diagnosis	Risk Factor	Claims	Last Date	Risk Score
Renal	OTHER CYSTOSTOMY	Renal, medium	9	Aug 26, 2012	0.93
Skeletal	PYOGEN ARTHRITIS-UNSPEC	Skeletal, medium	1	Dec 21, 2011	0.42
CNS	SPINAL CORD INJURY NOS	CNS, medium	2	Sep 7, 2012	0.41
Pulmonary	FOOD/VOMIT PNEUMONITIS	Pulmonary, medium	1	Apr 11, 2012	0.32
Psychiatric	PARANOID SCHIZO-UNSPEC	Psychiatric, high	92	Nov 26, 2012	0.27
Hematological	THROMBOCYTOPENIA NOS	Hematological, low	7	Apr 17, 2012	0.26
Cardiovascular	COMPLICATIONS/AUTO CARDIAC DEFIBRILLATOR	Cardiovascular, low	11	June 8, 2012	0.25
Metabolic	HYPOPOTASSEMIA	Metabolic, very low	5	Apr 11, 2012	0.19
Diabetes	DIABETES W/O COMPLICATION	Diabetes, type 2 low	3	Mar 1, 2012	0.10
Substance abuse	ALCOHOL ABUSE-UNSPEC	Substance abuse, very low	73	Nov 26, 2012	0.09
Infectious	CEFPODOXIME PROXETIL TAB 200 MG	Infections, medium -Rx	1	Feb 24, 2012	0.06
CNS	METHOCARBAMOL TAB 500 MG	Multiple Sclerosis/Paralysis-Rx	5	Jan 31, 2012	0.04
Infectious	SULFAMETHOXAZOLE-TRIMETHOPRIM TAB 800-160 MG	Infections, low -Rx	3	July 20, 2012	0.01
Cerebrovascular	UNSPECIFIED HEMIPLEGIA/HEMIPARESIS	Cerebrovascular, low	2	Oct 30, 2011	0
Eye	CATARACT NOS	Eye, very low	1	May 25, 2012	0
Renal	RETENTION OF URINE, UNSPECIFIED	Renal, low	27	Oct 26, 2012	0
Psychiatric	CHRONIC FACTITIOUS ILLNESS	Psychiatric, low	3	Mar 1, 2012	0
Skeletal	JT CONTRACTURE-HAND	Skeletal, low	4	Apr 9, 2012	0
Pulmonary	PNEUMONIA, ORGANISM NOS	Pulmonary, low	4	Apr 22, 2012	0
Cardiovascular	HYPERTENSION NOS	Cardiovascular, extra low	16	Sep 7, 2012	0
CNS	BRACHIAL PLEXUS LESIONS	CNS, low	3	May 23, 2012	0
Psychiatric	UNSPECIFIED EPISODIC MOOD DISORDER	Psychiatric, medium low	2	Oct 27, 2011	0
Psychiatric	PSYCHOSIS NOS	Psychiatric, medium	7	Sep 7, 2012	0

Intervention strategy: Chronic Care Management

- Nurse care manager to client ratio 1:50
 - Primarily face-to-face
 - Telephone support as needed

• Evidence-based protocols include:

- Diabetes management
- Pain management
- Fall assessment and prevention planning
- Medication management
- Health Action Planning
- Coaching for Activation[™]

• Comprehensive Assessment including Patient Activation Measure (PAM[™])

- Client-centered Health Action Plan and Goal Setting Worksheet
 - Set goals with client according to activation level
 - Education towards self-management of chronic illness







Risk determinants for targeting

Health service encounter risk criteria

- Predictive modeling (PRISM)
 - Past 15 months of integrated health care claims determine future medical cost and inpatient risk scores
 - High frequency conditions: diabetes, cardiovascular disease, mental health and substance abuse
 - Minimum risk score in top 20% of expected future medical costs for SSIrelated population

Criteria based on long-term care assessment data

- Client lives alone
- High risk moods/behaviors (agitation/irritable)
- Self-reported health rating is "fair" or "poor"
- Overall self-sufficiency declined in last 90 days
- Medication management risk



Findings to date

Chronic Care Management evaluation

- Modest net savings
- Driven by reduced IP and SNF costs
- Reduced mortality
- Increased patient satisfaction

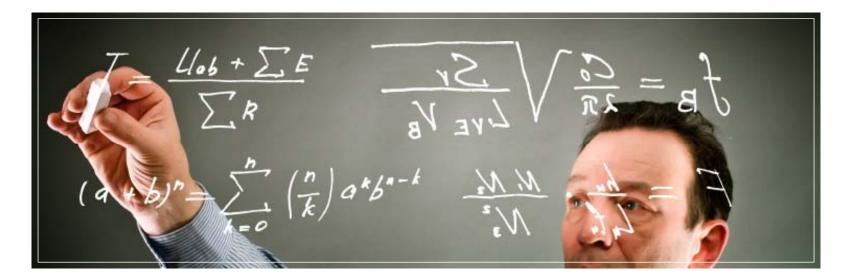
Other interventions

- Housing
- Substance abuse treatment



Targeting approaches

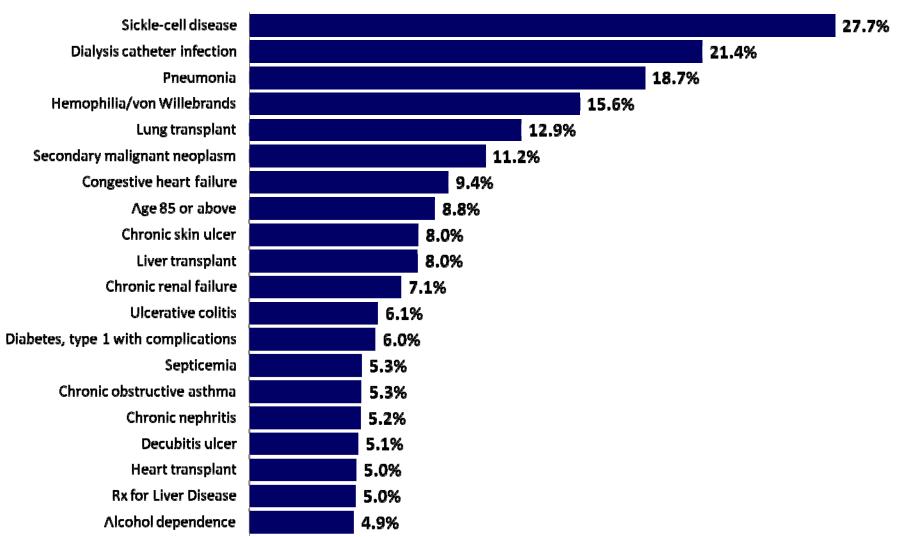
- Extreme ED utilization
- Expected future medical costs
- Prospective inpatient risk
- Care gaps and quality indicators





Prospective Inpatient Admission Risk Model

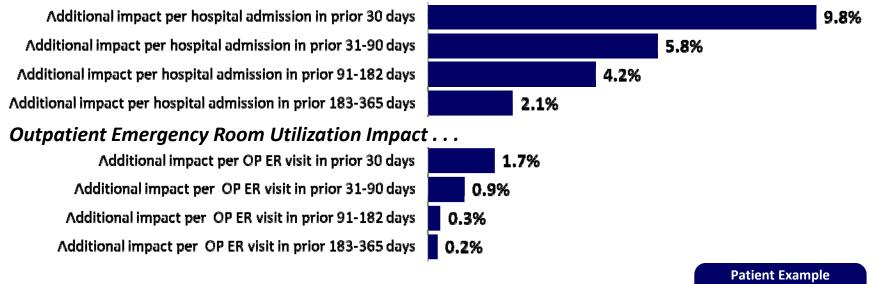
Example condition within risk group





Prospective Inpatient Admission Risk Model continued

Hospital Admission Impact . . .



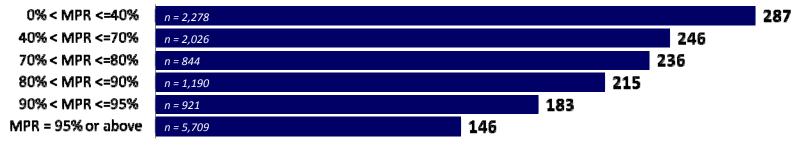
Jane Doe has been diagnosed with congestive heart failure (9.4%), poorly controlled type 1 diabetes (6.0%), and chronic obstructive asthma (5.3%). She was hospitalized once in the prior 31-90 days (5.8%), and twice in the prior 183-365 days (2 x 2.1% = 4.2%). She has been to the ED twice in the past month without being admitted to the hospital (2 x 1.7% = 3.4%). Her risk of an inpatient admission in the next 6 months is 28.3%.



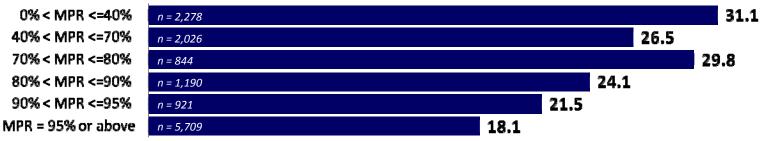
Care Gap Example: Antipsychotic Medication Adherence

Analysis of relationship between antipsychotic Medication Possession Ratio (MPR) and ER and Inpatient utilization

Outpatient Emergency Room/Emergency Department Visits (PER 1000 MM)



Medical Inpatient Admits (PER 1000 MM)



Psychiatric Inpatient Admits (PER 1000 MM)

0% < MPR <=40%	n = 2,278			18.1
40% < MPR <=70%	n = 2,026			18.3
70% < MPR <=80%	n = 844			16.6
80% < MPR <=90%	n = 1,190			16.5
90% < MPR <=95%	n = 921		9.9	
MPR = 95% or above	n = 5,709	6.2	_	



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State Medicaid agency role

- Work collaboratively with plans and providers to build shared commitment to improve outcomes for at-risk patients
- Support multi-system data integration and analytics
- Recognize impact of social and behavioral risk on medical utilization

