

HARVATH HEALTH



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WRAP-UP:

ONGOING OPPORTUNITIES FOR
SHARED LEARNING IN A NEW
ENVIRONMENT

WHAT WE'VE LEARNED ABOUT READMISSIONS

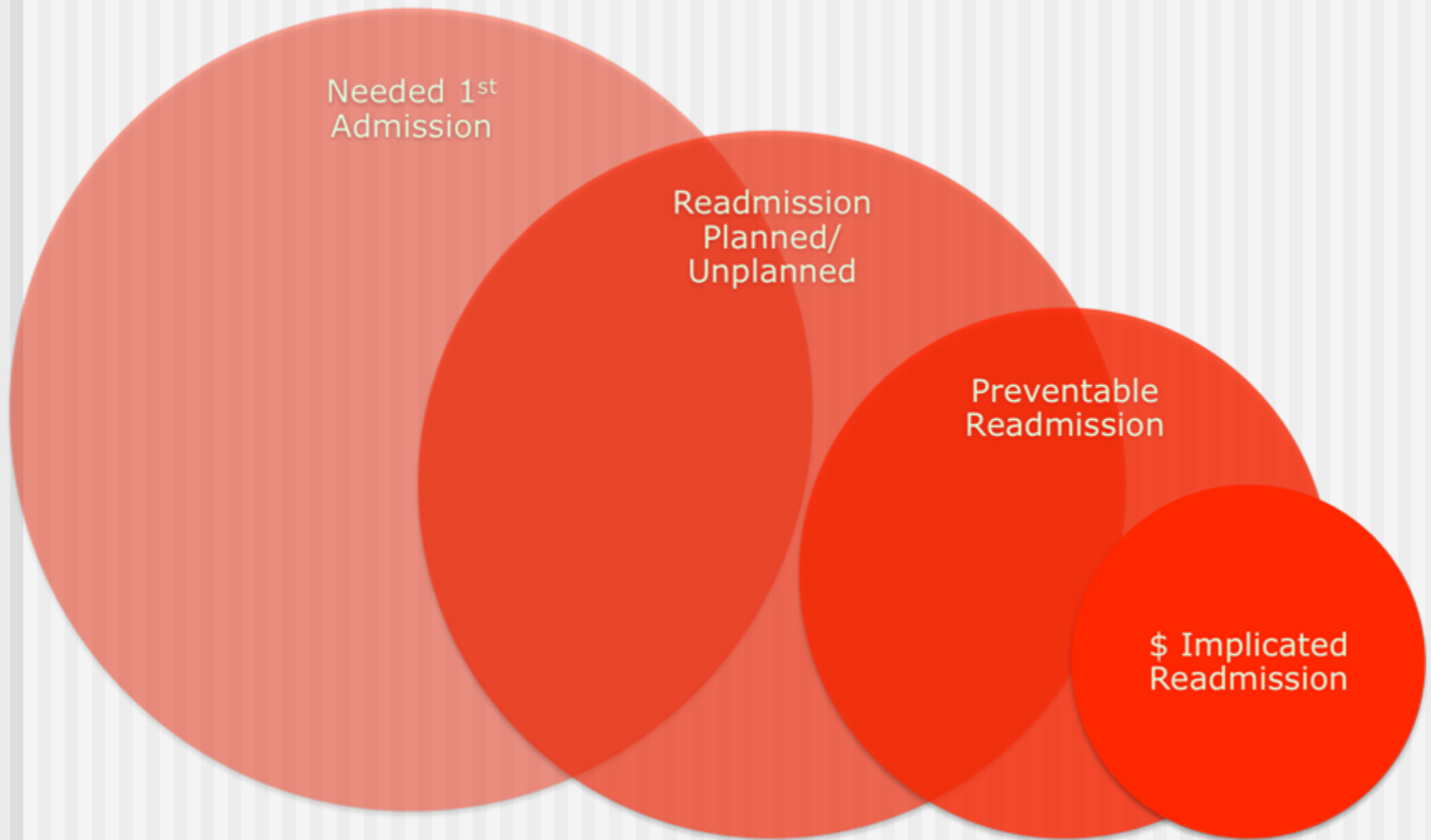
- Readmission rates and spending are significant
 - ~18% of patients readmitted within 30 days of discharge = \$15B in 2005
- Reducing readmission rates is both important and feasible
 - Wide variation: ~12% to ~22% by city in 2005
 - Medicare estimated savings > \$100B over 10 years if high-cost areas brought to national average
- Many readmissions are preventable
 - 75% of all 30-day Medicare readmissions were potentially preventable, with potential savings of \$12B to Medicare, according to Medicare Payment Advisory Commission
- CMS is targeting readmissions for three diagnoses:
 - Congestive heart failure (CHF), Pneumonia, and Acute Myocardial Infarction (AMI):
 - In the top 10 diagnoses for Medicare hospital discharges (CHF #1, Pne. #2, AMI #8)
 - These 3 makeup ~13% of total Medicare hospitalizations in 2006
 - 2008 CMS began collecting information on these readmissions
 - 2009 CMS began reporting back readmission data to selected hospitals
 - 2010 CMS plans to expand readmission data collection and reporting
 - CMS is tasked with accomplishing the \$\$\$ billion in savings earmarked in the Healthcare legislation

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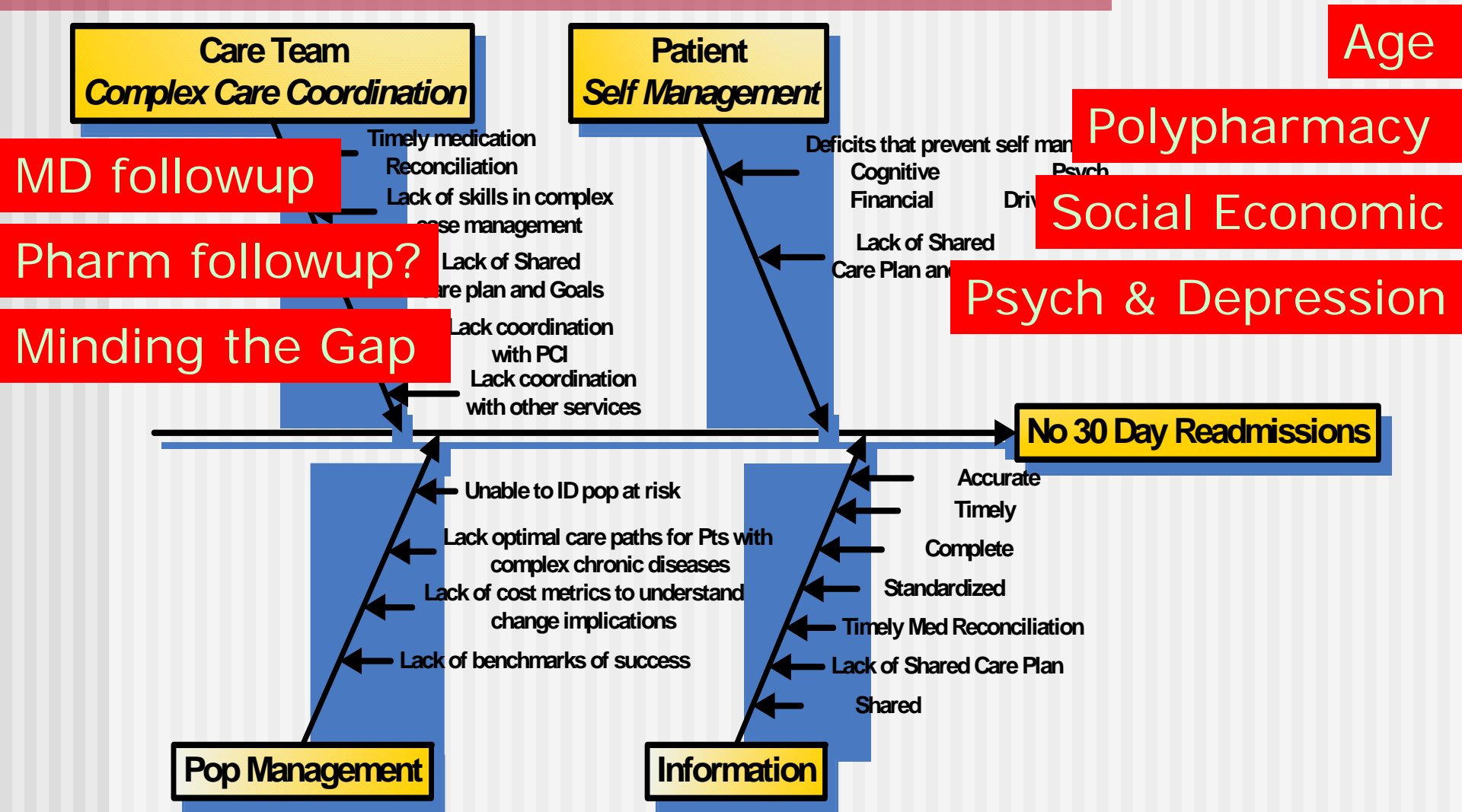


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ANATOMY OF A READMISSION

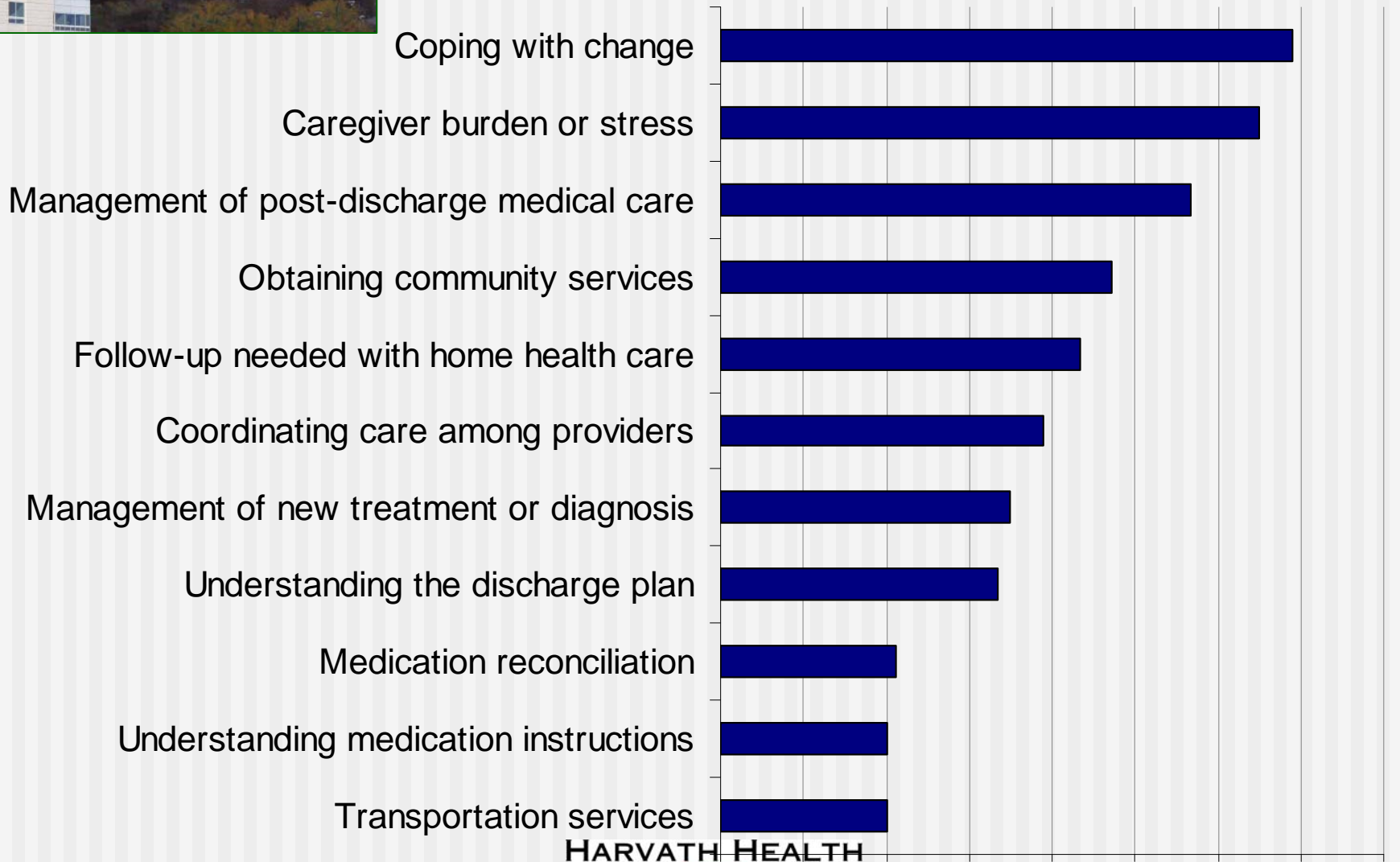


ISSUES SURROUNDING READMISSIONS RESEARCH





MOST COMMON PROBLEM AREAS



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0% 5% 10% 15% 20% 25% 30% 35% 40%

EXAMPLE PAGE

The tool includes an Example page that allows a user to see a properly filled out Evaluation page. The inputs will vary by organization, but the example page shows correct input logic.

HealthTech Readmission Understanding Evaluation (EXAMPLE)

Needs input from drop-down menu (Unless required to leave blank)

THIS IS AN EXAMPLE OF A CORRECTLY FILLED IN EVALUATION PAGE (INPUTS WILL VARY WIDELY BY HOSPITAL). THIS EXAMPLE PAGE REQUIRES NO INPUT AND IS FOR INSTRUCTIVE PURPOSES ONLY.

Category		Patient Psychographics												1st Hospitalization							
Item	Age	Sex	Marital Status	Race	City	State	Zip Code	Education	Transcription	Physical Deficit?	Cognitive Deficit?	Mental Deficit?	Admission Source	1st Admit Date	Unit	Discharge	Comorbidities	Date of 1st	DC	LOS	
Currently Collect	Yes/No	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	Yes	No	No	Yes	No	No	Yes	No	No	Yes
If Yes, Source	Manual/Elec/Both	Manual	Electronic	Electronic	Electronic				Manual		Manual	Both			Manual			Both			Both
If No, how difficult?	1=least, 3=most					2	1	2		2			2	1		3	2		1	1	2

Yes & No filled out for all metrics

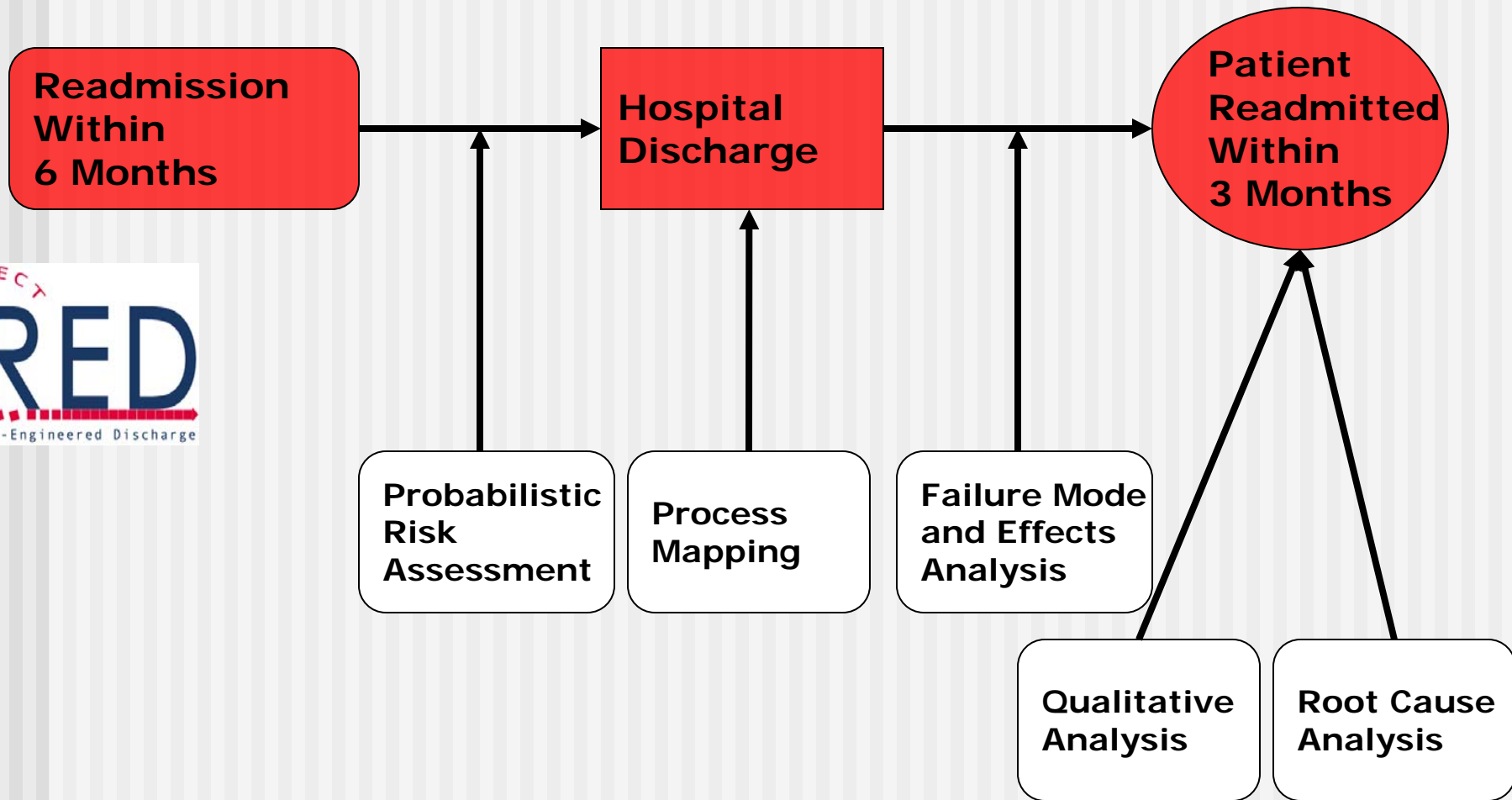
Manual/Elec/Both filled out for "Yes" metrics only

Category		Home Episode												2nd Hospitalization								
Item	F/U Date	Type of Service	ADL	Medication	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	ADL	
Currently Collect	Yes/No	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	Yes	Yes	No	No	No	No	No	Yes	Yes
If Yes, Source	Manual/Elec/Both	Electronic		Both	Both	Both		Manual		Both		Manual		Electronic	Electronic						Both	Electronic
If No, how difficult?	1=least, 3=most		1				3		3		2		2		3	1	2		1			2

Degree of difficulty filled out for "No" metrics only

Category		30-day Readmissions (RA) Yearly Lost \$ (per DRG)							
Item	RA	RA	RA	RA	RA	RA	RA	RA	RA
Currently Collect	Yes/No	Yes	No	No	Yes	Yes	No	Yes	Yes
If Yes, Source	Manual/Elec/Both	Electronic			Manual	Electronic		Manual	Electronic
If No, how difficult?	1=least, 3=most		2	3			1		

PRINCIPLES OF THE RED: CREATING THE TOOLKIT

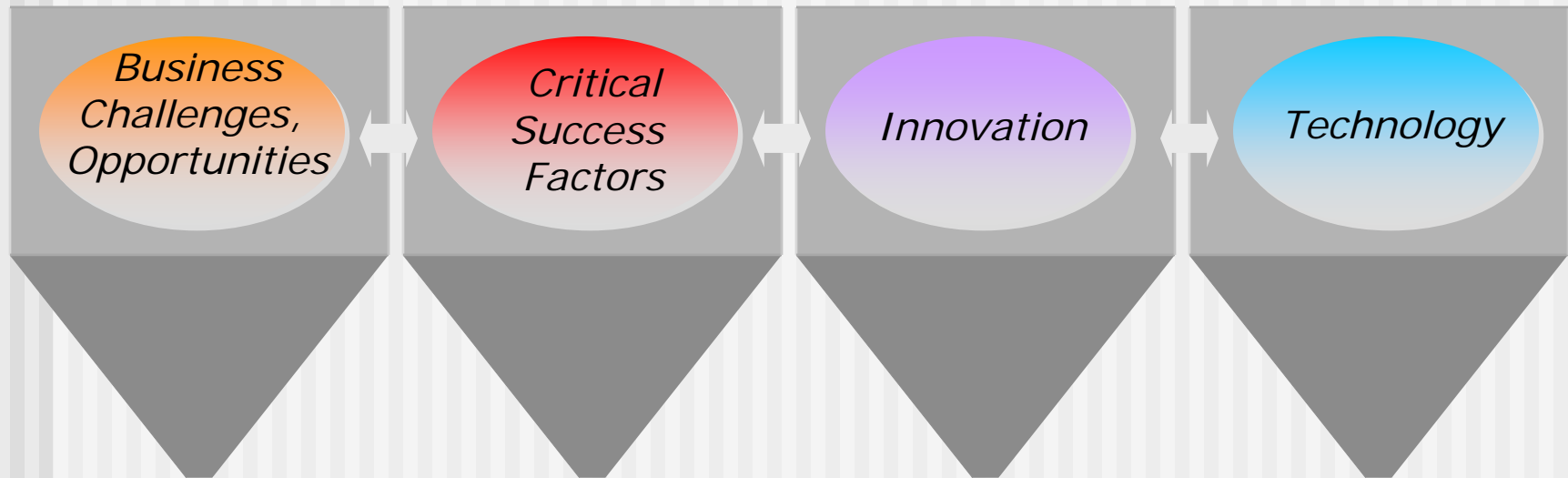


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CONNECTING THE DOTS?



Healthcare Challenges & Business Problems	Critical Success Factors & Metrics	Innovations	Technologies
Home care visits labor intensive (rural visits-travel, time, weather, cost)	Number of in person visits needed for appropriate care per episode	Use of telecommunications and remote monitoring to substitute for in-person home visits	*Two-way video *Remote sensor devices *Remote disease monitoring
Unable to identify populations at greatest risk for readmit	Decrease in readmissions rates	Automation of risk profiling and readmission analysis	*Computer algorithms *Data integration/mining software *Predictive Modeling
Lack of shared care plan and structures to advance self management *Clarity of Provider goals	*Patient compliance with care plan *Decreased readmissions *Fewer calls to management team	Customized discharge care plan protocols for complex home care management	*PHR *Provider and patient teleconferencing *Shared care plan


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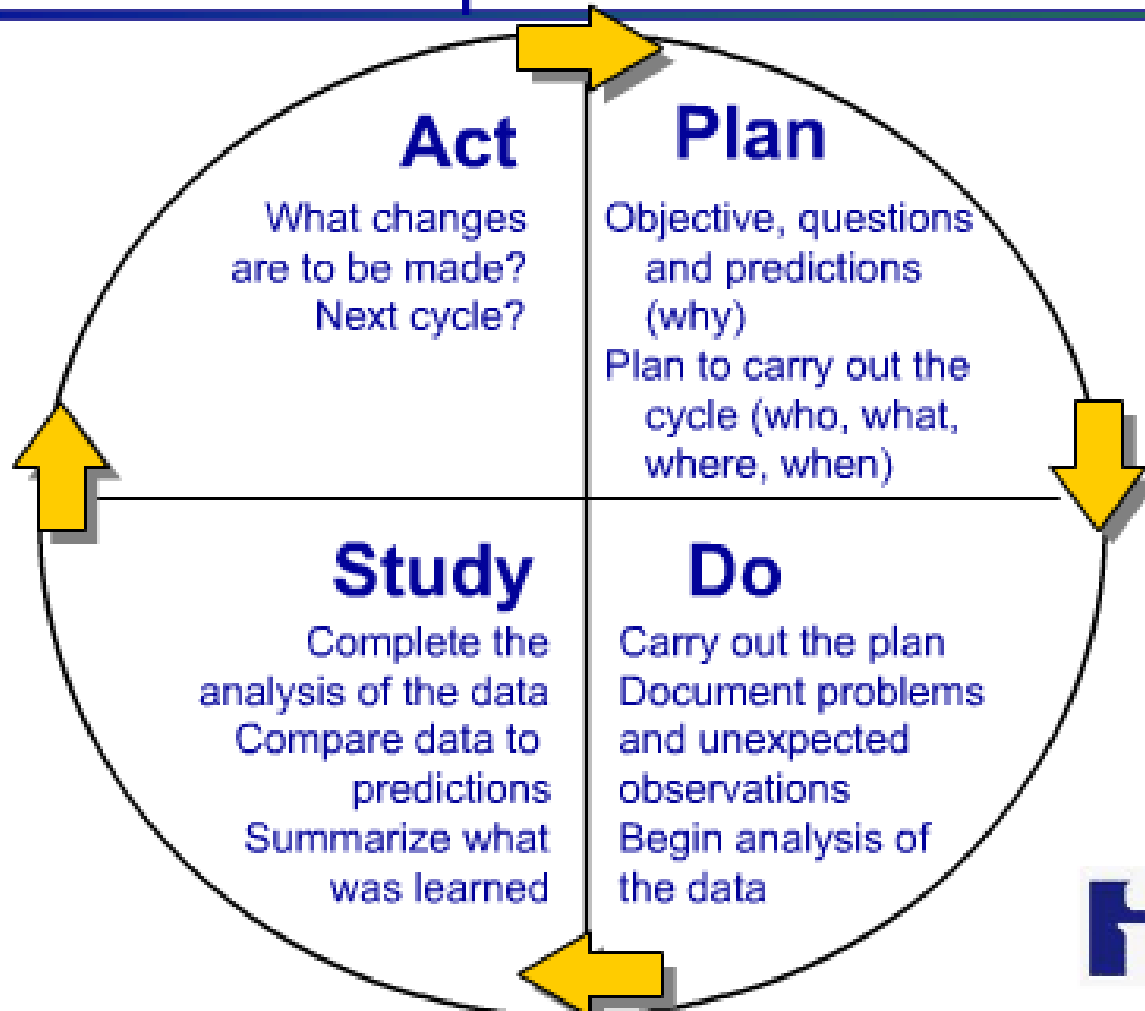
THE TRANSITIONS OF CARE MATRIX

The Transitions of Care Matrix map connects challenges to metrics to innovations to technologies

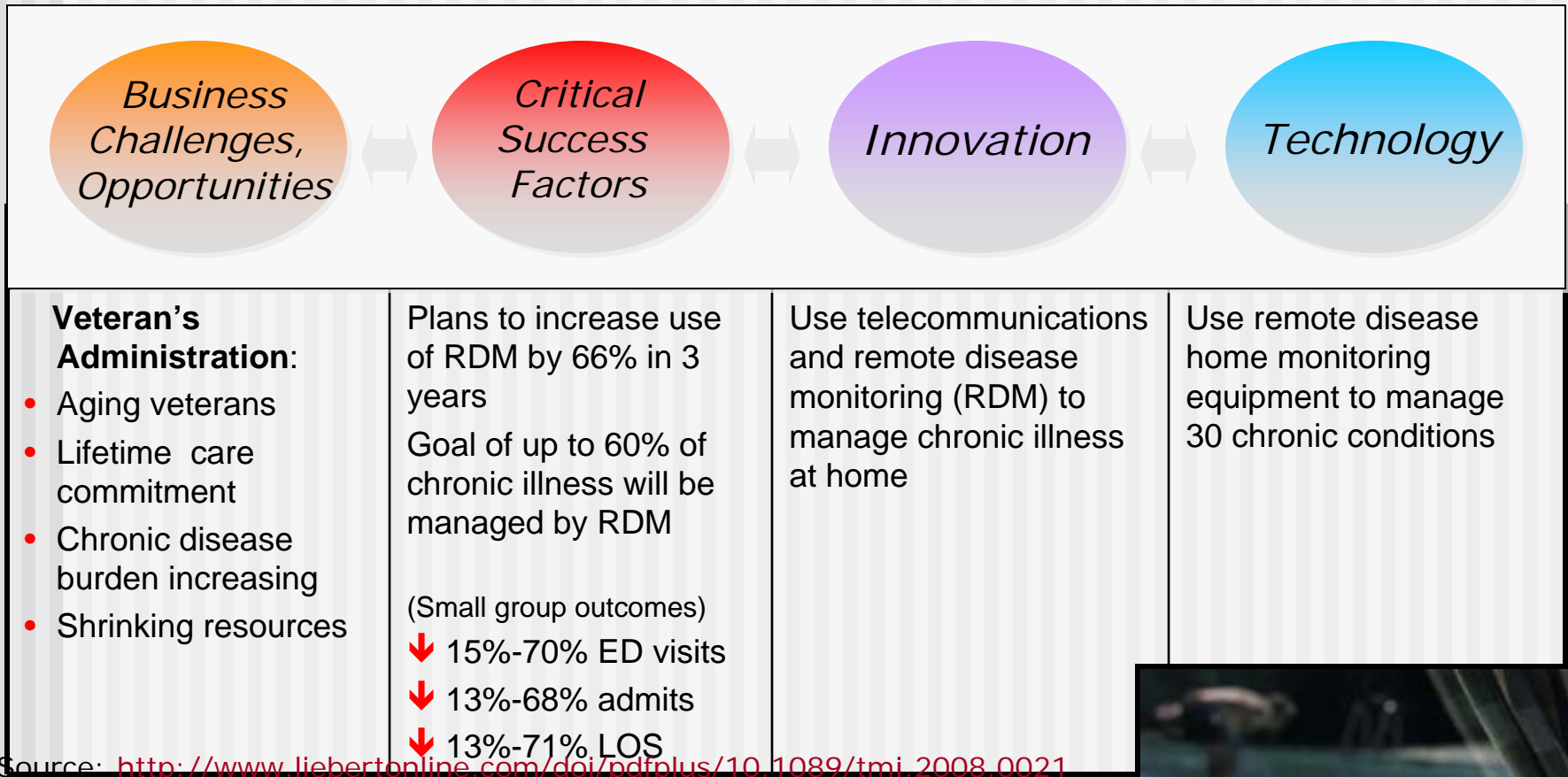
 Transitions of Care Matrix				
Healthcare Challenges & Business Problems	Critical Success Factors & Metrics	Innovations	Technologies	Expected Impact
<i>(Sample)</i> Home care visits labor intensive (rural visits-travel, time, weather, cost)	<i>Number of in person visits needed for appropriate care per episode</i>	<i>Use of telecommunications and remote monitoring to substitute for in-person home visits</i>	*Two-way video *Remote sensor devices *Remote disease monitoring	<i>Decrease number of inperson visits and add virtual visits with similar or better outcomes for episode of care</i>
Unable to identify populations at greatest risk for readmit	Decrease in readmissions rates	Automation of risk profiling and readmission analysis	*Computer algorithms *Data integration/mining software *Predictive Modeling	Risk stratification for specificity and sensitivity for populations at greatest risk for readmission
Lack of shared care plan and structures to advance self management *Clarity of Provider goals *Clarity of Patient goals *Progression to shared decision making *Monitoring	*Patient compliance with care plan *Decreased readmissions *Fewer calls to management team	Customized discharge care plan protocols for complex home care management	*PHR *Provider and patient teleconferencing *Shared care plan	Patients and caregivers know optimal care plan after discharge and capable of effective follow through
Lack of Pt psychological, cognitive and social needs integrated into discharge plan and assessment *accountability *robust assessment *inclusive DC/Transition plan	*Reduction in non-adherence to care plans *Higher level of patient compliance *Decrease in home medical errors	Simple, easy to use, accessible evaluation tools for pt psychosocial needs	*Patient assessment tools *Integrative case plan *Deficit reducing technologies (i.e. medication reminders, appointment pick ups etc.)	More comprehensive care plans and higher patient compliance
Lack of timely medication reconciliation	*Fewer ADEs *Fewer admissions due to ADEs *Better medication adherence	Timely team coordination and documentation	*PHR with medication administration software (ie KPHC) *Telemedicine conferencing esp. pharma	Improved disease management due to medication adherence. Better coordination of team care

ONCE YOU'VE DECIDED TO ACT — ACT WITH A PLAN

The PDSA Cycle for Learning and Improvement



INTEGRATED SYSTEM USE OF TELEMEDICINE TO REDUCE READMISSIONS



Source: <http://www.liebertonline.com/doi/pdfplus/10.1089/tmj.2008.0021>



HealthBuddy by
HealthHero
Remote Chronic Disease
Management System

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Care Coordination/Home Telehealth: The Systematic Implementation of Health Informatics, Home Telehealth, and Disease Management to Support the Care of Veteran Patients with Chronic Conditions

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Abstract

Between July 2003 and December 2007, the Veterans Health Administration (VHA) introduced a national home telehealth program, Care Coordination/Home Telehealth (CCHT). Its purpose was to coordinate the care of veteran patients with chronic conditions and avoid their unnecessary admission to long-term institutional care.

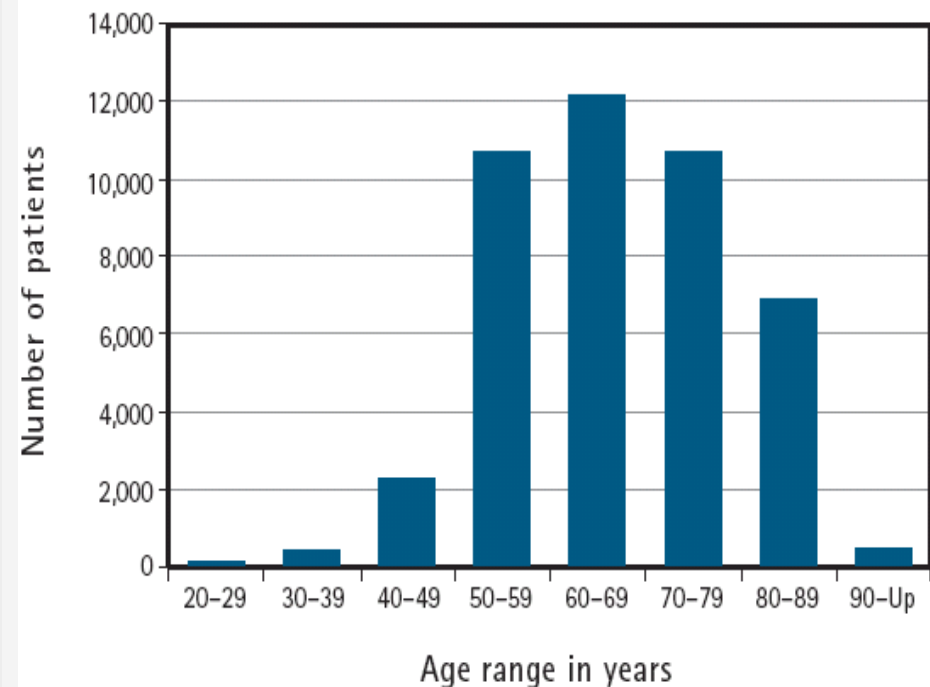
meet standardized clinical, technology, and managerial requirements. VHA has trained 5,000 staff to provide CCHT. Routine analysis of data obtained for quality and performance purposes from a cohort of 10,000 CCHT patients shows the benefits of a 25% reduction in number of bed days of care, 19% reduction in numbers of hospital admissions, and mean satisfaction score rating of 86% after enrollment into the program. The cost of CCHT is \$1,600 per patient per annum, substantially less than other NIC programs and nursing home care. VHA's experience is that an enterprise-wide home telehealth implementation is an appropriate and cost-effective way of managing chronic care patients in both urban and rural settings.

Key words: home telehealth, chronic care, outcomes, patient satisfaction, veterans

THE EARLY ADOPTER EXPERIENCE: VETERANS HEALTH ADMINISTRATION

- The cost of the program is \$1,600 per patient per annum. This compares with direct cost of VHA's home-based primary care services of \$13,121 per patient per annum, and market nursing home care rates that average \$77,745 per patient per annum.
- Since VHA implemented CCHT, a total of 43,430 patients have been enrolled in the program. CCHT patients increased from 2,000 to 31,570 from 2003 to 2007. VHA plans to increase its NIC services 100% above 2007 levels to provide care for 110,000 patients by 2011, or 50% of its projected NIC needs.
- VHA attributes the rapidity and robustness of its CCHT implementation to the "systems approach" taken to integrate the elements of the program. Wherever possible, CCHT incorporated existing business processes to reduce the program's overhead costs and increase efficiency.

Age Distribution of all CCHT Patients



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NEXT STEPS

- Determine issues with your readmissions
- Map issues to potential solutions
(which tools help you do this)
- Try solutions
(consider your organizational innovation acceptance scale)
(which tools and technologies help you do this)
- PDSA cycle your efforts
- Become a learning and sharing organization

WHAT YOU ARE GOING TO GET FROM THIS AFTERNOON

This afternoon you going to be hearing about:

- Medicare readmission challenges

- CMS and HHS priorities

- Determining what works best

- Policy frameworks for understanding readmissions

- Health information technology connecting health team

And tomorrow you will be hearing about:

- Transforming chronic care

- Aligning hospital and physician incentives

- Project RED, Kaiser Permanente, STAAR, Medical Home

- Health plan approaches

- Legal issues

- Models of care experiments



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THANK YOU

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