

# REDUCING HOSPITAL READMISSIONS THROUGH MEDICATION MANAGEMENT AND IMPROVED PATIENT ADHERENCE



STRATEGIES FOR IMPROVEMENT

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**NEHI** THE NETWORK FOR  
EXCELLENCE IN  
HEALTH INNOVATION

# EXECUTIVE SUMMARY

**Reducing hospital readmissions is a national priority with profound importance for health and for managing health care costs, quality and patient experience as the triple aim.**

National health care reform has only underscored the importance of effectively reducing hospital readmissions. Reform has spurred the growth of patient-centered medical homes, expanded the use of electronic health records and data exchanges and furthered the evolution of alternative payment models intended to encourage better coordination of patient care. Hospital systems nationwide have had success in reducing preventable hospital readmissions through advanced patient discharge planning and comprehensive medication management.

NEHI (The Network for Excellence in Health Innovation), the Anthem Foundation, Anthem Blue Cross in California and Anthem Blue Cross Blue Shield (BCBS) in Connecticut partnered on this project to provide an in-depth assessment of policies and practices already in use that could be used to create a national strategy for reducing preventable hospital readmissions through improved medication management and better patient medication adherence. This report also looks toward more comprehensive improvements, cognizant of the various fiscal and other resource constraints that confront the health care system's capacity to implement sweeping solutions.

We believe this report is especially timely as reductions in preventable hospital readmissions become a more important goal for health care quality improvement and payment policy (among commercial health plans and Medicare as well), and the challenge of ensuring good medication management that supports patient medication adherence (PMA) among newly discharged patients becomes increasingly significant. Current readmissions policies and value-based contracting target patients who invariably are discharged with multiple medications, including those with diagnoses of heart failure (HF), heart attack, pneumonia, and chronic obstructive pulmonary disease (COPD), as well as individuals with other co-morbidities (e.g., diabetes and hypertension).



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Not surprisingly, discussions with hospital discharge planners, care coordinators, providers of post-acute care, pharmacists and others confirm longstanding issues with medication management to aid the greater goal of PMA persist most strongly among newly discharged patients. The difficulties begin with fundamental tasks such as efforts to assemble complete and accurate medication histories as patients are admitted to the hospital. They continue as touch points within the health care system attempt to complete comprehensive medication reconciliation and counsel patients (and caregivers) on good use of their medicines, often without access to patients' formularies (or formularies which vary between in- and out-patient settings). These issues carry over to community-based providers and others within the patient's care milieu as hospital personnel attempt to coordinate with them to ensure the seamless management of medications. These issues are amplified for those patients who have multiple, chronic and complex medical conditions. Thus, strengthening effective medication management processes that support improved PMA are central to reducing hospital readmissions.

A description of near- and long-term recommendations for improvement is detailed in the "Next Steps" section of this report and highlighted below. Both are influenced by the current, rapid movement of health care payers, both public and private, toward risk-shared and value-based payment models such as "accountable care" and variations on it. Many of these new models are meant to prompt action to reduce avoidable hospital readmissions by offering financial incentives (or in the case of Medicare, financial penalties for failure to reduce them), whether or not readmission reduction goals are explicit. To support this, some are now channeling patient-specific data, panel or population management tools, and other resources to providers for care coordination. These enhanced forms of assistance should give stakeholders (hospital staff, primary care providers [PCPs], skilled nursing facilities, visiting nurse and home health, and community pharmacists) reason to consider new or complementary approaches, as well as taking a fresh look at older or customary approaches, to reduce readmissions.

### **NEAR-TERM RECOMMENDATIONS INCLUDE:**

- **Encouraging adoption of evidence-based transitional care models** by local groups (hospital staff collaborating with local PCPs and other care providers). The availability of expanded resources under new payment models may help simplify or improve



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longstanding problems of medication management within care coordination that these models must address to be successful.

- **Promoting the use by emergency department providers of available data and screening tools that identify patients at highest risk for readmissions** who typically have complex medication management challenges. This could include not only such things as electronic health record (EHR)-embedded questionnaires and new sources of patient medication data (e.g., medication history services), but also patient-specific data on medication use provided directly by payers as part of new risk-shared contracts. By doing so, hospitals can quickly prioritize those patients with the greatest potential need and triage them to appropriate staff in order to enhance PMA upon discharge.
- **Re-energizing discussions about how to improve the quality of medication reconciliation** as actually performed by hospital staff. Closely related to the recommendation above, data and tools now available through emerging payment models and data exchanges represent a resource for improvement, where those who hold patient medication data can consider adopting a standard of “Best Possible Medication Reconciliation.”
- **Fully incorporating patient-centered medical homes (PCMHs) into local action** to improve transitional care. Most payers (public and private) are actively promoting adoption of the PCMH model, encouraging PCPs to become active, if not co-equal partners, in reducing avoidable hospital readmissions by pro-actively managing post-acute care.
- **Assessing opportunities that more effectively utilize all pharmacy resources** to promote better medication management. This may include informal or organized outreach to retail pharmacy, as well as the creation of collaborative practice agreements between local partners (hospital staff, PCPs, community pharmacy and others), where innovative licensed providers can use existing collaborative practice authority or accountable care models to incorporate pharmacist-based medication therapy management services. All providers and caregivers should be aware of how to use existing authority, while more difficult policy decisions on provider status and pharmacist advanced practice play out at the state level.



Thus, strengthening effective medication management processes that support improved PMA are central to reducing hospital readmissions.

- **Utilizing Medicare Medication Therapy Management services for eligible patients.** Medicare Medication Therapy Management (MTM) is now an opt-out benefit by which eligible patients are guaranteed access to medication review and planning services by their Medicare prescription drug insurance plans unless they choose otherwise. As such, it is an asset to which patients can be alerted to or referred by hospital staff or community-based providers. Local pharmacies that are in-network for the patient's prescription drug plan may be in a position to provide services to patients. Currently, there is discussion within CMS and in Congress about potential changes or expansions of the service. Be that as it may, the existing MTM benefit remains a tool that can be utilized for at least some patients who are also likely to be at risk and targeted for more intensive post-acute and transitional care, such as patients with chronic heart failure and myocardial infarctions.

#### **LONG-TERM RECOMMENDATIONS INCLUDE:**

- **Making comprehensive, accurate patient medication data available at all points of care in real time a clear and explicit goal.** California, Connecticut and most other states have long-term goals for health data exchange – implemented by public or private entities – which may create an exciting new possibility for patient medication data exchange. The increasing ubiquity of electronic prescribing data should enable expanded exchange of patient-specific data on adherence (including fill, refill and discontinuation information), particularly as prescription benefit insurance plans and community pharmacies face increasing demand for adherence improvement from Medicare and other payers.
- **Creating a focused, state-level discussion of how to identify and, if necessary, certify clinical skill levels of pharmacists who can be deployed to implement comprehensive medication therapy management** to improve patient adherence. While this dialogue is now underway in California with the recent change in law that gives pharmacists “provider” status, it should also be linked to discussion of payment support in new and emerging payment models, such as accountable care.
- **Exploring the opportunities to implement evidence-based modifications to prescription drug coverage payment policy.** Changes in insurance coverage, such as adjusting medication co-pays and the provision of medications to patients upon hospital discharge, may serve to support better PMA while also containing costs.

# BACKGROUND

**The advances in medication management to improve PMA and hospital readmissions is achievable but requires coordinated, comprehensive strategies involving multiple stakeholders, including patients/families/caregivers and a host of health care professionals (e.g., PCPs, specialists, pharmacists, care coordinators) and organizations (e.g., hospitals, patient-centered medical homes, community pharmacies, skilled nursing, home health).**

The reasons patients do not take medications as prescribed vary, including side effects, inability to afford co-pays, lack of clarity about the benefits of these therapies and elaborate medication regimens from multiple providers that are difficult to manage and understand. Overall, nearly half of all prescribed medications are not taken as indicated.<sup>1,2</sup> An analysis of electronic prescriptions for new medications in the U.S. found a 28% non-fill rate,<sup>3</sup> while a recent Canadian study uncovered nearly one-third of new prescriptions were never filled.<sup>4</sup> Inadequate adherence has been linked to poor health outcomes/additional illness,<sup>5</sup> avoidable hospital admissions,<sup>6</sup> premature death<sup>5,7</sup> and \$290 billion in unnecessary health care expenditures annually.<sup>8</sup> Conversely, improved adherence has been linked to better health outcomes.<sup>9,10</sup>

The linkages between poor adherence, inadequate medication management and hospital readmissions are multiple and complex. Patient populations targeted for readmissions reduction typically possess several co-morbid conditions with complicated medication routines. For example, 58% of patients with heart failure have also reported managing up to five or more co-morbid conditions and were prescribed, on average, more than six medications<sup>11</sup>. Efforts to use electronic health records in hospitals to enhance medication reconciliation (broadly defined as a systematic process to compile a patient's medication regimen in order to ensure accuracy and safety) have been met with mixed results.<sup>12</sup> And while there are promising interventions that improve adherence and lower costs,<sup>13</sup> they are not often interwoven into the multifaceted fabric of health care delivery.

Avoidable hospital readmissions have been cited by the Centers for Medicare and Medicaid Services (CMS) as one of the leading problems facing the U.S. health care system,<sup>14</sup> with others highlighting improvements in readmissions as an area ripe for attaining costs savings.<sup>15</sup>



58%

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**FIGURE 1: 30-DAY ALL-CAUSE ADULT READMISSION RATES FOR MOST PREVALENT CONDITIONS BY INSURANCE TYPE<sup>18</sup>**

In 2011, roughly 20% of Medicare patients (nearly 2 million people) were readmitted to a hospital within 30 days of discharge, though it is estimated that 75% of these readmissions could have been prevented<sup>16</sup> with annual savings to Medicare at \$17 billion.<sup>14</sup> As a result, the Medicare Hospital Readmissions Reduction Program (HRRP),<sup>17</sup> created within the Affordable Care Act of 2009, presses hospitals to lower 30-day readmission rates or face financial penalties for failing to do so. Implemented in October 2012, the HRRP mandates that hospitals unable to meet the readmission caps set by CMS will have their base Medicare inpatient claims payments reduced, up to its cap presently set at 3% in FY '15. Current CMS readmission targets include acute myocardial infarction, heart failure, pneumonia, chronic obstructive pulmonary disease and elective total hip or knee arthroplasty.<sup>17</sup>

That said, it's interesting to note that the principal 30-day adult hospital readmissions' diagnoses, regardless of payer type, typically involve high-risk and vulnerable patients with significant use of medications to manage their conditions.<sup>18</sup> The top conditions are listed in **FIGURE 1** by patients' insurance category.

MEDICARE	MEDICAID	PRIVATE INSURANCE
1 HEART FAILURE	1 MOOD DISORDERS	1 MAINTENANCE CHEMOTHERAPY*
2 SEPTICEMIA	2 SCHIZOPHRENIA	2 MOOD DISORDERS
3 PNEUMONIA	3 DIABETES	3 COMPLICATIONS OF SURGICAL/ MEDICAL CARE

\*typically a planned readmission

# THE PROJECT

**NEHI, the Anthem Foundation, Anthem Blue Cross in California and Anthem BCBS in Connecticut partnered on an initiative to identify both near- and long-term practical solutions in these states.**

These recommendations are meant to spur further improvement in Connecticut and California, and to teach illustrative lessons for stakeholders in other states who are now attempting to reduce readmissions by improving medication management that boosts patient adherence. For the purposes of this project, medication management (sometimes identified as medication therapy management or MTM) is defined as “helping patients get the best benefits from their medications by actively managing drug regimens and by identifying, preventing and resolving medication-related problems.”<sup>9</sup> Stakeholders may include patients/families/caregivers, public policymakers (e.g., legislators, public health), academia (e.g., schools of pharmacy, researchers) and those involved in health care delivery (e.g., providers, hospitals and other health care organizations, payers, pharmacists, professional organizations, home health, skilled nursing facilities).

## GOAL

The long-term goal of this project is to demonstrate feasible mechanisms for reducing 30-day hospital readmission rates associated with inadequate and fragmented medication management, with particular focus on high-risk patients. Here, “high risk patients” are defined as those most likely to be readmitted to the hospital within 30 days of a previous discharge. Patients that fall into this category are likely to have co-morbid conditions with complex medication regimens and/or a history of non-adherence. Successfully implementing strategies that will improve processes, and ultimately adherence, for these patients will bring the greatest benefits in terms of better patient outcomes and greater value to the system overall.

## PARTICIPANTS

NEHI worked with local Anthem leaders to identify and invite key stakeholders to participate in this project. There was diverse representation geographically and organizationally, including hospitals and their associations (chief executive officers, chief medical officers, vice presidents and directors of quality improvement, directors of clinical integration), physician groups



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(executive directors), pharmacists (outpatient, university-based, hospital pharmacy directors), care management organizations (directors of quality improvement) and health care networks (chief medical officers, directors of clinical integration).

## **PROCESS**

The NEHI team utilized interactive data collection procedures – teleconferencing, group discussion, brainstorming, tagging priorities and sorting potential emerging themes – to identify central issues, the challenges and strategies to overcome these and a list of potential actions that may be pursued by key stakeholders to reduce hospital readmissions for high-risk patients through improved medication management. In addition, participants identified and prioritized next steps on discussing these items among those involved, as well as opportunities for engaging patients/families/caregivers.

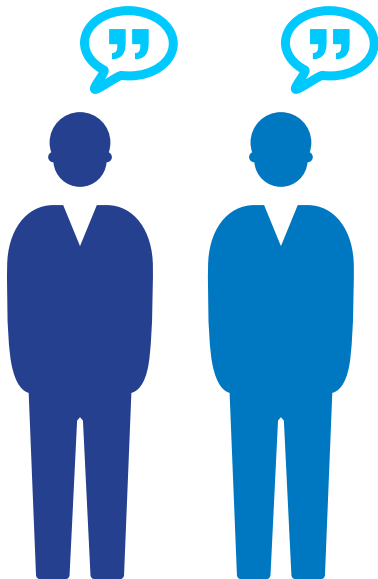
### **PRINCIPAL QUESTIONS INCLUDED:**

- What can we learn from current efforts?
- What factors are driving best practices?
- What are the chief barriers to improvement?
- What are the best opportunities for progress?
- What actions (new policy, collaborations, etc.) would be most helpful?
- What actions are most feasible and should be the highest priorities?
- What organizations need to be part of this discussion in order to take further action?

## **DATA ANALYSES**

### **NEHI STAFF CONDUCTED DATA ANALYSES WITH THESE OBJECTIVES IN MIND:**

- Developing and sorting common themes, as well as defining areas of distinction within California and Connecticut.
- Highlighting collective challenges and opportunities to overcome them.
- Outlining potential components of a highly efficient hospital-based medication management system.
- Delineating and clarifying key participants in a patient's community of care.
- Determining potential points of intervention.



THREE DRAFT MODELS/CHARTS WERE CREATED THAT EXEMPLIFY THE MULTI-FACETED NATURE OF THE MEDICATION MANAGEMENT MILIEU:

- Community of Care
- Patient Medication and Information Pathways
- Targets of Change

EACH OF THESE GRAPHICAL REPRESENTATIONS WERE VETTED AND REFINED WITH PARTICIPANTS' INPUT USING THESE GUIDING QUESTIONS:

- Does the Community of Care model reflect all the key stakeholders in the post-discharge/transitional care period, specifically as it relates to more effective medication management and use to reduce preventable readmissions? If not, who/what is missing?
- Does the Patient Medication and Information Pathways model reflect all the possible data/opportunities required to support better medication management post-discharge? If not, what's missing?
- Does the Patient Medication and Information Pathways model make intuitive sense? What could be improved or changed (e.g., structure, content) to make it more understandable?
- Does the Targets of Change chart reflect the medication management and readmission landscape in your state? What is missing?
- Are the specific problems on the Targets of Change chart an accurate reflection of your state's experience? What is missing? What should be deleted?
- Are the key stakeholders captured on the Targets of Change? Who should be added or deleted?

*The results of these discussions are outlined within the Models section below, with the Targets of Change appearing in Appendix A.*

Finally, given the project's focus on practical solutions, NEHI worked to transform the broad challenges and opportunities outlined by participants into a list of Potential Action Items (see Appendix B). In doing so, the intent was to provide greater focus on assessing the feasibility and interest from local stakeholders as to which target areas held the greatest likelihood for reducing hospital readmissions through improved medication management that boosts patient medication adherence.

# MODELS

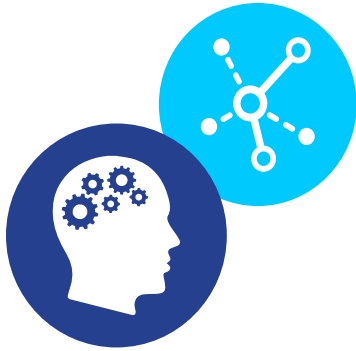
## COMMUNITY OF CARE

One factor in NEHI's analysis encompassed clarifying all stakeholders within the medication management and adherence milieu. While hospitals themselves are the entities subject to readmission penalties, a good deal of activity must occur in collaboration with patients/families and other organizations with which they interact to maintain a manageable and adherable medication routine. This Community of Care (inspired by the "Community of Care" stakeholder groups organized to foster local collaboration under an initiative of the Connecticut Hospital Association and Connecticut's Qualidigm Quality Improvement Organization) is portrayed in [FIGURE 2](#).

Though not all patients and their families will interact with each of the entities within the Community of Care, hospitals will need to have a transition and management plan in place to oversee all potential external relationships. Communication between all stakeholders involved is imperative in order to achieve improved coordination of care and medication adherence that results in reduced readmissions.

## PATIENT MEDICATION AND INFORMATION PATHWAYS

There are numerous opportunities to implement processes and interventions that further enhance medication management and adherence in the hospital environment. Utilizing the problem list created by participants that is embedded with the Targets of Change (Appendix A), as well as examples of successful initiatives that are striving to achieve objectives similar to this project, a Patient Medication and Information Pathways model was created to visualize an "ideal" system that would effectively correlate the physical flow of a patient with his/her up-to-date medication data from the emergency room through discharge. This is presented in [FIGURE 3](#).





**FIGURE 2:  
COMMUNITY OF CARE**

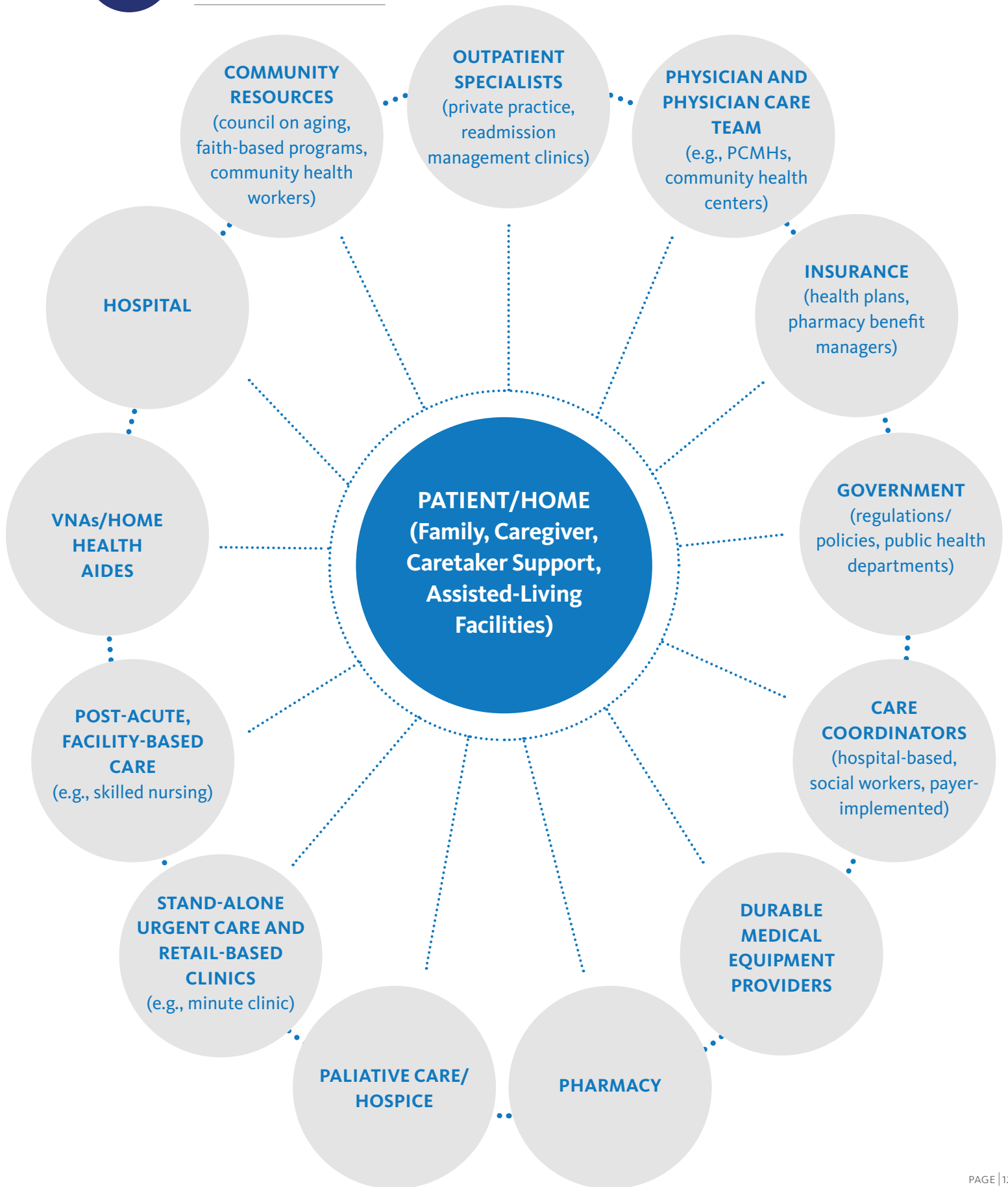




FIGURE 3: PATIENT MEDICATION AND INFORMATION PATHWAYS

## PATIENT MEDICATION PATHWAY



PRE-ADMISSION/  
OBSERVATION  
STATUS

## INFORMATION PATHWAY

COMMUNITY  
OF CARE

- » Electronic availability of current medication list, medical record, medication history, problem identification, PCP, patient demographics, insurance coverage
- » Up-to-date access to out-patient formulary info
- » Use of systematic mechanism to determine patients at highest risk in order to determine level of medication management interventions
- » Use of pharmacy tech for those high-risk patients

- » Medication review
- » Prescribing via Computerized Provider Order Entry (CPOE)
- » Reporting to Prescription Drug Monitoring Program
- » Comprehensive medication reconciliation (filled/refill/discontinuation)
- » Update electronic health record (EHR) with lab results, drug-drug interaction check, e-prescribing data

### Use of transitional care and/or discharge models that include:\*

- » Full medication reconciliation by pharmacy tech/pharmacist, including discontinued meds or dosage changes and alignment with out-patient formulary/copays
- » Patient education regarding updated medication reconciliation (e.g., “teach-back” methodologies/protocols)
- » Electronic records updated and transmitted (including medication list, history, etc.)
- » Follow-up appointment with PCP or other key provider(s), including support for follow-through
- » E-Prescribing to pharmacy and/or patient leaves with medications in-hand at discharge that map to patient’s outpatient formulary
- » Optimizing the medication regimen (e.g. synchronization)
- » Patient-generated health data
- » Post-discharge call/home visit

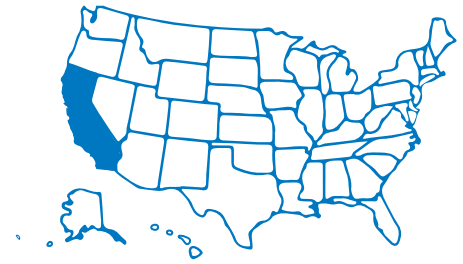
\* All changes documented/referred back to all other players in the Community of Care

# CALIFORNIA

As the largest state, California faces challenges in addressing statewide initiatives due to its population heterogeneity and pure size. Within California, there are 302 hospitals subject to HRRP oversight and, therefore, potential penalties. Of these, 79 hospitals received no penalty for FY '15, while 18 received penalties of 1% or more.<sup>20</sup> Thus, almost 74% of California hospitals are currently subject to some financial penalty (up from 66% in FY '14 and 64% in FY '13)<sup>20</sup> and would benefit from prioritizing and implementing broader adoption of readmission reduction solutions, including those related to improved medication management.

That being said, increasing penalty rates do not capture efforts underway that have the potential to produce positive outcomes on medication management, adherence and readmission rates. One such example is the expanded adoption and use of health information technologies like electronic health records (EHRs) and the ability to send prescriptions electronically (“e-prescribing”). By April 2014, 53% of California physicians were using their EHR system to prescribe electronically, an increase from only 4% in December 2008.<sup>21</sup> During the same time period, the number of community pharmacies in California with e-prescribing capacity hit 92%.<sup>21</sup> By the end of 2013, the state saw an increase from 3% to 48% in the volume of new and renewal e-prescriptions.<sup>21</sup>

Increased adoption of e-prescribing creates new opportunities for improvement of medication management.<sup>22</sup> For example, it is now standard practice at many pharmacies and pharmacy chains for electronic receipt of prescriptions to trigger automatic outreach to patients, thus improving rates of first fill of new prescriptions, or what researchers refer to as primary medication adherence.<sup>23</sup> Increased use of electronic prescribing also ensures that more comprehensive patient medication records are amassed electronically over time. Surescripts, a national e-prescribing network, now actively markets such records to hospital and community-based providers. Systematic uptake of electronic medication records may await widespread provider adoption of highly functional electronic health records and more systematic patient data exchange, but the recently announced Cal INDEX data exchange (outlined below) may represent an important step forward in this process.



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New public policy to support care coordination is also occurring in California. In October, 2013, Governor Brown signed SB 493 into law, thereby expanding provider status to pharmacists and creating authority for the recognition of Advanced Practice Pharmacists.<sup>24</sup> Pharmacists in this state are now in an advantaged position to provide care, due to the potential frequency of interactions they may have with patients. SB 493 allows pharmacists to practice “at the top of their license” and use these regular visits by patients to discuss medication issues and correct the problems with an appropriate course of action. This may be especially advantageous for high-risk patients eligible for the Medicare Part D MTM benefit, as pharmacists may immediately intervene to assist those with numerous medications. Ideally, greater inclusion of the pharmacist will create a more thorough continuum of patient care and management, avoiding unnecessary visits to the primary care physician and more importantly, to the hospital.

As noted, stakeholders in California are taking important steps on patient data exchange that could support more efficient and effective medication management. In August 2014, Blue Shield of California and Anthem Blue Cross in California announced an \$80 million effort to fund the first three years of the California Integrated Data Exchange, or Cal INDEX, which will gather claims data on nine million plan members across payers and providers.<sup>25</sup> This collection will include information on diagnoses, doctor and hospital visits, procedures, lab test results and, potentially, medication information. Following the Cal INDEX announcement, nine health information exchange organizations in California signed a trust agreement framework and are working to establish a network for data sharing between unaffiliated providers called CTEN (California Trusted Exchange Network). Working with the California Data Use and Reciprocal Support Agreement (CalDURSA), these collaborations establish a comprehensive framework that aims to overcome barriers to interoperability while ensuring patient privacy and data security.<sup>26</sup> This broad data collection and dissemination significantly increases the timeliness and accuracy of patient data to inform medication management decisions. Along with the uptake in EHRs and e-prescribing, patient medication management is more likely to be successfully monitored, therefore improving adherence and reducing unnecessary trips to the hospital.



## CASE EXAMPLE: THE “MAGNIFICENT SEVEN”

The Hospital Association of Southern California hosted a pilot BOOST Collaborative from June 2011 through June 2012, focusing on reducing readmissions. Seven hospitals participated and several strategies for reducing readmission resulted, including a focus on contacting the patient (home visit, clinic visit, or detailed telephone call) within 72 hours of discharge, to determine the patient’s:

- Understanding of his/her illness
- Understanding of his/her medication regimen, and actual procurement of any new medications
- Support systems in the home and durable medical equipment delivery
- Changes in condition that would require a call to his/her primary care provider
- Confirmation or scheduling of the follow up visit to primary care provider within 7 days





# CONNECTICUT

Though there were overwhelming similarities while describing challenges and opportunities in both California and Connecticut, the states have approached the issue of preventable readmissions a bit differently. Within Connecticut, there are 30 hospitals subject to HRRP oversight. Of these, two hospitals received no penalty for FY '15, while six received penalties of 1% or more.<sup>20</sup> Thus, nearly 93% of Connecticut hospitals are currently subject to some financial penalty (up from 77% in FY '14 and 73% in FY '13)<sup>20</sup> and, similar to California, would benefit from adopting readmission reduction solutions.

Connecticut is also seeing an uptake of health information technologies. 75% of Connecticut physicians were using their electronic health records to send e-prescriptions by April 2014, an increase from only 7% in December 2008.<sup>21</sup> During the same period, the number of community pharmacies with e-prescribing capacity hit 93%.<sup>21</sup> By the end of 2013, the state saw an increase from 6% to 58% in the volume of new and renewal e-prescriptions.<sup>21</sup> Again, the use of these systems is advantageous to both prescribers and pharmacists as they look to intervene with patients who are less or non-adherent.

One of the major opportunities noted in Connecticut is the large number of local collaborations on the ground. Some of these mostly informal alliances have set ambitious goals of improving transitional care among hospitals, primary care practices, home health agencies and nursing homes. In an industry that can be often very segmented and competitive, participants in Connecticut candidly shared their difficulties and possessed an openness and dedication to learn from the success of others.

Additionally, Connecticut is currently experiencing shifts within the local health care market, including a rising number of mergers<sup>27</sup> and health systems continuing to migrate to one commercial EHR platform (Epic).<sup>28, 29</sup> One opportunity in the consolidation of technology and resources is the greater capacity to exchange more timely and meaningful data between providers and other members in the continuum of care. These changes may allow hospitals and other health care organizations overcome the lack of interoperability thus far, as well as reduce the complexities of data security and patient privacy.



**Thus, nearly 93% of Connecticut hospitals are currently subject to some financial penalty (up from 77% in FY '14 and 73% in FY '13)<sup>20</sup> and, similar to California, would benefit from adopting readmission reduction solutions.**



## CASE EXAMPLE: THE DREAM TEAM

The 'Communities of Care' initiative, initiated in 2010, is sponsored by the Connecticut Hospital Association and the Qualidigm Quality Improvement Organization. Sixteen of these groups exist throughout the state and provide a base level of "human interoperability." The local Hartford group, dubbed the "Dream Team," is a collaborative group of hospital and community-based multidisciplinary health care professionals (physicians, pharmacists, RNs, respiratory therapists and social workers) that meets monthly, working to reduce 30-day all cause hospital readmissions and improve the safety and quality of patient care transitions across settings. They discuss shared readmissions in the form of a de-identified patient case review, and other agenda topics. Based on these case reviews, the Dream Team has been able to implement process changes across the continuum. The Team's most recent effort surrounds medication management services, particularly focused on standardizing and expanding Medication Therapy Management to improve medication reconciliation, medication errors and, ultimately, adherence. Other Dream Team efforts have included regimenting education for heart failure patients, revising and standardizing user-friendly discharge instructions to include elements needed for transitions of care and creating a notification process to alert PCPs when their patient has been admitted to the local hospital. Outcomes have shown a significant reduction or elimination of barriers and improved communication across care settings. The members learn a great deal from each other as to the challenges and lack of resources the different organizations face, as well as the successful processes that are in place.



# DISCUSSION

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As with all complex problems, solutions to reducing readmissions through better medication management to improve PMA can be found through enhanced communication and coordination among all players within the health care system in order to advance patient outcomes and reduce costs. Indeed, the Community of Care is best visually imagined not as a flat, two-dimensional model, but rather as a three-dimensional mobile where all components are in delicate balance with one another. Unequal pressure on any one part of the system easily throws the others into a state of disequilibrium, but coordination and good communications among all parties can dramatically reduce disruptions of care, flawed transitions, increased readmissions and poor patient health outcomes.

It is also important to acknowledge that, while the Patient Medication and Information Pathways model is presented in a linear format here for practical purposes, this is rarely the reality when it comes to health and the delivery of care. The well-being of an individual patient, especially one who may be considered high-risk, is typically fluid and precarious. Despite the best intentions of this patient, his/her family, providers, payers and other key entities within the U.S. health care ecosystem, the oft-stated challenges – cost, quality, patient engagement and, increasingly, the social determinants of health – can complicate the best course of action at any given point of care.

Fortunately, significant interest and momentum exists within both California and Connecticut to reduce hospital readmissions through a broad spectrum of initiatives, including improved medication management that supports better PMA.



**As with all complex problems, solutions to reducing readmissions through better medication management to improve PMA can be found through enhanced communication and coordination among all players within the health care system in order to advance patient outcomes and reduce costs.**

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# NEXT STEPS

**A tremendous opportunity lies ahead to build on and leverage the momentum from this project to keep progress moving forward nationally to reduce readmissions through greater medication management to and PMA. However, real and significant challenges face all players in the readmissions and medication management arenas which impact their capacity to commit time and other resources to this tremendous enterprise.**

The rapid push by public and private payers (including Anthem) into accountable care contracts or variations thereof means that new tools and more patient data will be available to clinicians at the point of care. In many instances, care coordination services and dedicated care coordination staff are available as well. Reduction of avoidable readmissions is frequently an explicit or implicit goal, especially among patient populations (such as HF and COPD patients) who are also likely to be targets of population health management goals. That being said, there is recognition that safety net hospitals and other organizations which operate within traditionally under-served communities may need additional resources to implement the processes required for better care coordination to achieve readmissions goals.

Additionally, in both Connecticut and California, state-level strategies for health care delivery transformation, such as the State Innovation Model or SIM plans, heavily target care coordination and improved care for complex patients. Reduction of avoidable readmissions is a clear goal, but improvements in related medication management processes are implicit at best. The SIM and related planning processes should consider these long-term goals to improve medication management and enable appropriate patient adherence.

Taking these realities into account, the recommendations that follow are categorized into both near-term possibilities and those that will require longer-term commitments.

## NEAR-TERM RECOMMENDATIONS

- **Review and incorporate models of transitional care (such as Naylor,<sup>30</sup> Coleman,<sup>31</sup> Projects RED<sup>32</sup> and BOOST<sup>33</sup>).** Resources now available under accountable care or similar paradigms can provide fresh resources for hospital-to-pharmacy-to-PCP-to-home



**The rapid push by public and private payers (including Anthem) into accountable care contracts or variations thereof means that new tools and more patient data will be available to clinicians at the point of care.**



The new tools and data available to hospitals are also available to primary care practitioners; again, local collaborations among members of the Community of Care can act as a forum and a network for disseminating good practices.

and/or skilled nursing facility medication coordination. Local collaborative groups (such as the Connecticut “Communities of Care” groups or those organized under the Hospital Engagement Networks<sup>34</sup>) are a natural forum for discovering how to deploy these resources.

- **Screen for patients at highest risk for medication management and adherence challenges upon arrival at the emergency department.**

There are a number of no-cost tools or those embedded within EHRs available that support medication management and PMA, including those designed for use in the hospital and in the home by nurses, aides, family caregivers and patients themselves. Additional sources could include medication history services and patient-specific data on medication use provided directly by payers as part of new risk-shared contracts. By determining who needs the greatest help early on (those who are co-morbid and on multiple medications), hospital staff can target appropriate resources that will assist those patients in achieving the best possible medication adherence, thus improving patient outcomes.

- **Adopt explicitly higher standards of quality for the hospital medication reconciliation process.**

In the absence of more comprehensive, real time patient-level medication records, stakeholders in Connecticut, California and other states should consider a higher standard for medication reconciliation quality, such as the “Best Possible Med Reconciliation” that calls for reviewers to combine medication information available at the point of care with at least one external source of information. Data from health plans, including data available over web interfaces that bypass current difficulties in EHR interoperability, create new opportunities for compiling patient medication lists (e.g., Anthem MMH+ system<sup>35</sup>). Data feeds from payers to providers (albeit feeds that are often lagged in time) are becoming increasingly available. Also, as e-prescribing becomes ubiquitous in nearly every state, the accessibility of electronic medication histories provided by Surescripts may become more attractive.

- **Make patient-centered medical homes full partners in the transitional care and readmissions reduction process.**

Reduction of avoidable readmissions is not a job just for hospital staff. Public and private payers, including Anthem, Inc. have made the PCMH a fundamental building block of accountable care and population health management. One of the major objectives of the PCMH



**Nearly every state has existing authority for collaborative practice agreements between prescribers and pharmacists, and collaborative drug therapy management (CDTM) agreements can be executed under these rules.**

is to track patients through the hospitalization process and to pro-actively reach out for rapid follow-up after discharge. The new tools and data available to hospitals are also available to primary care practitioners; again, local collaborations among members of the Community of Care can act as a forum and a network for disseminating good practices.

- **Assessing opportunities that more effectively all utilize pharmacy resources to promote high-value medication management strategies.** In 2013, California became one of only five states to authorize a form of Advanced Pharmacist Practice (the APP) certification, and to extend provider status to pharmacists. The APP designation will still require codification in regulation, and extension of provider status to pharmacists remains a contentious issue in many states. Nevertheless, nearly every state has existing authority for collaborative practice agreements between prescribers and pharmacists, and collaborative drug therapy management (CDTM) agreements can be executed under these rules. Additionally, informal outreach and engagement between hospital staff and community pharmacy has been a hallmark of recent engagement efforts in both CA and CT, while the Medicare prescription drug program has created the Star Ranking System to determine how Advantage and Part D programs perform.<sup>36</sup> This may expand as commercial payers increase use of accountable care or similar payment models. Stakeholder collaborative groups should initiate or expand upon practical “how to collaborate“ discussions that will encourage collaborative practice while more longstanding issues (such as pharmacist provider status and potential credentialing programs) play out among policymakers.

- **Utilize Medicare Medication Therapy Management (MTM) services for eligible patients.** Specific benefits and implementation are the responsibility of the Medicare Prescription Drug Plans (Part D Plans), and so are not formally integrated with health insurance benefits or with patient care goals that may be outlined in contracts between health plans and providers. Nevertheless, as health plans increasingly seek to shift providers towards value-based payment models and towards achievement of specific, population-level quality improvement goals (such as the reduction of avoidable readmissions), the Medicare MTM benefit could become a more important asset for post-acute care. Some provider groups and professional societies in Connecticut have also called for creation of a



**While the opportunities discussed point toward optimism and awareness of the issues at hand, it would be naïve not to recognize California, Connecticut and, presumably, other states face challenges.**

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Medicaid MTM benefit in that state, and as California considers implementation of its new Pharmacist Advanced Practice law, authorization of MTM-like services in that state could eventually become a reality as well.

## **LONG-TERM RECOMMENDATIONS**

- **Make the availability of real-time, comprehensive and accurate patient medication prescribing and adherence data available at all points of care an explicit goal.** Fragmented information or gaps in patient medication data is not only a risk for medication safety and therapeutic effectiveness, but a source of costly inefficiency in the patient care process. As noted above, the increasing ubiquity of electronic prescribing and of data and analytical tools offered by payers now makes it possible to achieve a higher standard of quality in medication processes, including not only medication reconciliation, but also information on fill, refill, and discontinuation of medications. In California, the recently announced Cal INDEX initiative represents a potentially important opportunity to integrate patient medication data into clinical records and make them available at critical points of care. Moreover, Medicare Part D drug plans are subject to increasingly rigorous standards of evaluation on the adherence performance of member beneficiaries, which can create incentives for up-to-date records.
- **Create a clear and focused discussion among stakeholders on how to utilize pharmacists with appropriate clinical skills, as needed, in the transitional care process.** As noted, collaborative practice authority provides a legal basis for utilizing pharmacists, but over the long-term, prescribers and payers show real concern about matching pharmacists with clear clinical skills to patients in need. A renewed discussion on detecting or certifying pharmacist skills should be matched with identification of payment supports that may now be available in emerging payment models such as accountable care.
- **Explore evidence-based, practical changes to prescription drug coverage payment policy among all payers (Medicare, Medicaid, commercial health plans).** National discussions, backed by recent research,<sup>38</sup> are emerging regarding the reduction of patient medication co-pays as a means to achieve greater patient medication adherence, thus avoiding more costly interventions that result from poor PMA. Other shifts in coverage could contribute to improved medication performance among newly-discharged patients. For example, numerous providers have



**The lack of access to comprehensive patient data at the point of care, as noted earlier, can affect care management decisions and lead to non-adherence and preventable hospital readmissions. While EHR and e-prescribing capabilities continue to be adopted in both states, alongside these systems must exist an effort to make the data accurate and interoperable.**

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suggested discharging patients with a short supply of medications (as covered by the patient’s out-patient formulary) in order to give hospital staff and community providers a “head start” on coordinating longer-term medication needs for patients. State payers and providers should investigate the evidence that exists and align current payment structures to support the best possible PMA outcomes.

While the opportunities discussed above point toward optimism and awareness of the issues at hand, it would be naïve not to recognize California, Connecticut and, presumably, other states face challenges. Throughout this project, several participants pointed to what they called “initiative fatigue” as one of the greatest barriers to achieving state-wide improvement. A familiar concept in the health care industry, it applies to cooperating in multiple improvement campaigns on a typically small scale that tend to necessitate use of organization resources such as staff time and money. While the initiatives themselves were not touted as the issue, particular emphasis was placed on the need to highlight and disseminate the success of certain projects over others as a way to overcome this fatigue.

Unlike in California, the lack of broad, comprehensive health information technology infrastructure in Connecticut cannot be ignored. The state was provided federal funding through the HITECH Act passed in 2009, which created the Health Information Technology Exchange of CT (HITE-CT). After failing to effectively establish and perform, however, this effort was shut down in July 2014 when legislation was passed to repeal the creation of HITE-CT as a quasi-public agency.<sup>39</sup> Meanwhile, Connecticut initiated a State Innovation Model (SIM) project, funded by the CMS Innovation Center, which continues as one potential opportunity to “hard wire” medication management objectives into practice transformation, including efforts to build electronic infrastructure (e-prescribing, EHRs, medication data exchange). Other possible sources of information comprise claims’ data from health plans and pharmacy benefit managers (PBMs), either directly or through state-wide all-payer claims databases. Incentives must be created to encourage the sharing of this content.

The lack of access to comprehensive patient data at the point of care, as noted earlier, can affect care management decisions and lead to non-adherence and preventable hospital readmissions. While EHR and e-prescribing capabilities continue to be adopted in both





**The reality of limited time and money to support further efforts did not go unnoticed.**

states, alongside these systems must exist an effort to make the data accurate and interoperable.

And, the sheer size of the state of California and its population create a challenge in itself. While smaller states have the ability to benefit from frequently meeting face-to-face, California has had to approach this type of collaboration differently. Within the state there exists a central hospital association, but also three regional hospital associations (Southern, Northern and Central and San Diego and Imperial Counties). This allows for a more tailored approach aimed at accommodating the size and diversity that exists within the state.

Stakeholders generally agreed upon the key opportunities and challenges outlined below.

## OPPORTUNITIES

- **Acceptance of the problem.** Participants readily acknowledge and can identify the barriers that exist to optimizing medication management, both within their own organizations and state-wide. They know that there is no single solution that will offer a “quick fix” to the challenges they face.
- **Shared belief in the value of the goal.** There was broad consensus that improved medication management that supports better adherence as a mechanism to achieving not only a reduction in readmissions, but more importantly, better patient outcomes, is a crucial and worthy goal.
- **Pre-existing initiatives that are achieving results.** There is no need to start from scratch, as a number of programs and interventions have already launched on the ground to move the needle on this problem.

## CHALLENGES

- **Resource constraints.** The reality of limited time and money to support further efforts did not go unnoticed. Many commented on the challenges of keeping this issue front and center while other competing demands cross their desks. This is magnified within safety net hospitals and those systems that support individuals from traditionally under-served communities.
- **Buy-in, especially of those “not in the room.”** While these discussions were fruitful, there was some potential element of “preaching to the converted.” Moving beyond participants to convince their colleagues that this should be a prioritized



**There was, however, recognition by participants that patients are not only at the center of this effort, but also that their voices must be incorporated into activities going forward. At the same time, defining the patient's perspective and who best represents that is unclear.**

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focus of any institutional effort may be a significant obstacle to opportunities going forward.

- **Determining leadership and processes for moving ahead.**

There are some potential “usual suspects” in this area who may be considered to lead further efforts in each state, but there was not consensus about who that might be. Additionally, there was an appreciation that any organization doing so must be suitable to a broad spectrum of stakeholders.

- **Mechanisms for reaching consensus.** The list of Potential Action Items (Appendix B) is extensive, and covers a spectrum of possible avenues for change. While there was agreement about the need to go after the “low-hanging fruit,” defining and agreeing on what that target should be is not as clear.

- **Patient involvement.** By its very nature, the project's focus on hospital readmissions and medication management within that environment lent itself to beginning the conversation with health care professionals and the organizations in which they reside. There was, however, recognition by participants that patients are not only at the center of this effort, but also that their voices must be incorporated into activities going forward. At the same time, defining the patient's perspective and who best represents that is unclear.

- **Role of Private Health Plans.** The Affordable Care Act has done much to elevate the issue of avoidable hospital readmissions by assessing Medicare payment penalties on hospitals with readmissions deemed excessive, and by several initiatives to encourage the adoption of evidence-based models of discharge planning and transitional care. Commercial health plans must acknowledge a role as well, particularly as they implement their own goals for reduced readmissions. Options could include formal support and resources for improved medication management between hospitals and community providers, access to patient claims and medication records, direct payment for care coordination, adjusting co-pays to increase affordability of patient medications and more informal community or state-wide collaborations such as that represented by this project funded by the Anthem Foundation.

# CONCLUSION

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**The models of health care delivery and reimbursement in the U.S. are evolving as a result of the Affordable Care Act, requiring all stakeholders to be more nimble and innovative in order to achieve the Triple Aim of reducing costs, improving patient experience (including quality) and strengthening the health of populations.<sup>40</sup>**

Reducing hospital readmissions through better medication management approaches that promote PMA maps well to these principles and has national implications for improved health outcomes. Results of this work, in combination with the adoption of evidence-based models for medication management and care coordination, can help to define strategies and priorities for action across a broad spectrum of sectors and constituents.

It is evident through this project that the health care community is poised to move ahead, with many leaders in this realm, including Anthem, especially as it relates to building value-based payment models that target stronger medication management practices to assist PMA. However, this project identifies a greater need to work collectively and effectively across organizations. With all stakeholders providing a voice, implementing this project's recommendations can move the needle toward a stronger, more integrated and collaborative system that will achieve the common goals of reduced hospital readmissions through improved medication management and, thus, improved patient medication adherence and health outcomes.



# APPENDIX A: TARGETS OF CHANGE

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Participants identified numerous barriers to effective medication management, with substantial similarities that held constant regardless of locale. The challenges exist across constituent groups (e.g., patients, providers, organizations, payers, governing bodies) and sectors (e.g., educational, motivational, economic/ resources, health information technology, care delivery ecosystem, regulatory/policy) without necessarily being mutually exclusive. As a result, potential targets for change for any given issue may have numerous points of intervention, many of which are out of the control of the hospital itself. However, participants agreed that there are areas for greater collaboration and connection between constituents to address these challenges and make significant progress towards the greater goals.

Within the group discussions, participants were asked to prioritize their key concerns within a matrix of highest/lowest impact by highest/lowest difficulty. Analysis showed that while there was some consensus, it quickly became clear that a participant's perceptions of these often differed depending upon their profession and the type of organization for which they worked. Thus, one person's high impact/low difficulty item may be another's low impact/high difficulty issue. There was, however, agreement that pursuing high impact/low difficulty challenges, or "low hanging fruit," would result in the greatest achievable outcomes.

FIGURE 4 outlines the possible targets of change (sectors and constituencies) associated with reducing hospital readmissions through enhanced medication management and adherence within the context of the commonly mentioned problems.



As a result, potential targets for change for any given issue may have numerous points of intervention, many of which are out of the control of the hospital itself. However, participants agreed that there are areas for greater collaboration and connection between constituents to address these challenges and make significant progress towards the greater goals.

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**FIGURE 4: TARGETS OF CHANGE**

PROBLEM LIST	EDUCATIONAL					MOTIVATIONAL					ECONOMIC RESOURCES				
	Pa	Pr	Or	In	Go	Pa	Pr	Or	In	Go	Pa	Pr	Or	In	Go
med co-pays, pricing and deductibles (including specialty pharmacy) too costly for some											●			●	●
lack of individual approach to patients with different needs	●	●	●			●	●	●							
lack of time/ability to manage ongoing med changes	●					●						●	●		
patients' changing insurance/docs -- increased due to ACA											●	●	●		
level of patient/family engagement and/or motivation	●	●	●	●		●	●	●	●		●	●	●	●	
patient demographics (health/technological literacy, educational level, primary language, etc.) and the impact on patient understanding of his/her insurance, meds/ med history/new or changes to meds, choices, having/knowing their PCP, etc.	●	●	●	●											
lack of ROI models for med rec investments (resources, QI, data collection, IT, etc.)												●	●	●	
lack of collaborative relationships across care settings and provider competition, including integration of pharmacists							●	●				●	●		●
overcare coordination that causes confusion and misinformation												●	●		●
providers not part of integrated systems have less access to support tools												●			
need for PCMHs, ACOs, other models of care/payment												●	●	●	●
lack of state/federal standards, HIT/HIE strategic plan that includes database for fills and claims												●	●		●
financial misalignment leads to limited risk/ accountability for some re: ED readmits												●	●		
IT med rec systems difficult to use, unable to detect errors or highlight conflicting meds/ drug interactions															
lack of overall coordinating mechanism to communicate/translate end-to-end med rec with CPOE, home and non-formulary meds	●	●	●			●	●	●			●	●	●		

**Key:**

**Pa** (Patients): Patients, Families/Caregivers, Social Support Networks

**Pr** (Providers): MDs, RNs, Pharmacists/ Pharmacy Techs, Home Health Aides, Community Health Workers, etc.

**Or** (Organizations): Hospitals, Integrated Delivery Systems, Community Health Centers, Safety Net Facilities, MD Group Practice, Retail Pharmacies, Skilled Nursing Facilities, Visiting Nurse Association, Assisted Living Facilities, Patient Advocacy Groups, etc.

**In** (Insurers): Private, CMS, Self-Insured Employers, etc.

**Go** (Governing Bodies): State/Federal Gov't & Public Health, Accrediting Agencies, Professional Associations

**FIGURE 4: TARGETS OF CHANGE (CONT.)**

PROBLEM LIST	HEALTH INFORMATION TECHNOLOGY					CARE DELIVERY ECOSYSTEM					REGULATORY/ POLICY				
	Pa	Pr	Or	In	Go	Pa	Pr	Or	In	Go	Pa	Pr	Or	In	Go
med co-pays, pricing and deductibles (including specialty pharmacy) too costly for some															●
lack of individual approach to patients with different needs															
lack of time/ability to manage ongoing med changes							●	●							
patients' changing insurance/docs -- increased due to ACA						●	●	●		●					●
level of patient/family engagement and/or motivation															
patient demographics (health/technological literacy, educational level, primary language, etc.) and the impact on patient understanding of his/her insurance, meds/ med history/new or changes to meds, choices, having/knowing their PCP, etc.						●	●	●	●	●					
lack of ROI models for med rec investments (resources, QI, data collection, IT, etc.)		●	●	●			●								
lack of collaborative relationships across care settings and provider competition, including integration of pharmacists		●	●		●		●	●		●					
overcare coordination that causes confusion and misinformation							●	●		●					
providers not part of integrated systems have less access to support tools		●					●								
need for PCMHs, ACOs, other models of care/payment							●	●	●	●					●
lack of state/federal standards, HIT/HIE strategic plan that includes database for fills and claims	●	●	●	●	●	●	●	●	●	●	●	●			●
financial misalignment leads to limited risk/ accountability for some re: ED readmits							●	●	●						●
IT med rec systems difficult to use, unable to detect errors or highlight conflicting meds/ drug interactions	●	●	●												
lack of overall coordinating mechanism to communicate/translate end-to-end med rec with CPOE, home and non-formulary meds	●	●	●			●	●	●		●					●

**Key:**

**Pa** (Patients): Patients, Families/Caregivers, Social Support Networks

**Pr** (Providers): MDs, RNs, Pharmacists/ Pharmacy Techs, Home Health Aides, Community Health Workers, etc.

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**In** (Insurers): Private, CMS, Self-Insured Employers, etc.

**Go** (Governing Bodies): State/Federal Gov't & Public Health, Accrediting Agencies, Professional Associations

# APPENDIX B: POTENTIAL ACTION ITEMS

## MEDICATION MANAGEMENT ECOSYSTEM

- Increase adoption and interoperability of health information technology (HIT), including Meaningful Use (MU)-certified electronic health records (EHRs), e-prescribing and online lab ordering, computerized provider order entry (CPOE), clinical decision support (CDS), a state-wide health information exchange (HIE), etc., across all providers and organizations, including home and community-based services' (HCBS) case managers.
- Create and provide real-time and contemporaneous access at the point of care to patients' comprehensive (all-prescriber, all-dispensing pharmacy) medication data, including fill, refill, discontinuation, and non-insurance fills. Needs a standard for length of time when pulling this info while reconciling electronic and claims-based data.
- Create and provide access to patients' relevant inpatient and outpatient formularies at the point of care so as to better align prescribed medications to what the patients' insurance will cover.
- Explore mechanisms to reduce 24-48 hour turnaround times that sometimes occur as a result of out of stock of medications at pharmacies.
- Suggest that PCPs educate patients on the option of prepared packaging solutions for complex medication regimens.
- Provide suggestions of standardized medication education materials that are consistently used to reinforce adherence in a community.
- Create and sustain local Community of Care groups (e.g., Qualidigm, CT Hospital Association) that meet on a continuous basis as a source of practical information on discussing and resolving medication process issues in the absence of an ideal electronic infrastructure. Include Aging and Disability Resource Centers (ADRCs) as a part of the consortium.



**Create a mechanism to produce, maintain, and disseminate a list of successful initiatives, “lessons learned”, or what resources (potentially unrecognized) we already have in the state.**



**Educate hospital CFOs regarding medication management and readmissions, including ROI for medication reconciliation staffing.**

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- Create a mechanism to produce, maintain, and disseminate a list of successful initiatives, “lessons learned”, or what resources (potentially unrecognized) we already have in the state.

## **TECHNOLOGY**

- Design HIPAA-compliant, encrypted provider-facing workflow applications that support medication management at the point of care, including those that link to a web-based medication site that can be updated at each site of care.
- Assess viability of applications to assist patients and doctors in medication documentation.
- Create or access real-time communication platform for care plans across specialists.

## **PAYMENT AND DELIVERY SYSTEM RESOURCES AND INCENTIVES**

- Expand ACO and other payment models now active to support medication tasks that are part of coordinated care, including the electronic capability to share medication management and reconciliation updates with Community of Care entities.
- Review co-pay/deductible formulas and benefits to encourage follow-through on medication regimens for newly discharged patients (i.e., encourage post-discharge visit with the PCP/appropriate provider, encourage pick-up of full medication order at the pharmacy).
- Reimburse pharmacists (including “minute-clinic” staff) for medication reconciliation and counseling for patients at risk of readmission (i.e., in hospital, during transitional care) and consider similar reimbursement systems for services to at-risk patients identified pre-admission (in community, in ED, in observation stay).
- Educate hospital CFOs regarding medication management and readmissions, including ROI for medication reconciliation staffing.
- Develop a cost/reimbursement system for medication reconciliation activities (e.g., Surescripts) that is better aligned to distribute the costs of maintaining those systems to those who benefit financially from their use.

## **HOSPITAL**

- Employ validated screening tools for ED use to determine high risk patients across all payers and all patient populations (not just pneumonia, MI or HF).





**Build planned medication tapers/discontinuation protocols into systems, where appropriate.**

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- Emphasize the responsibility of information collection within the hospital and relay any medication changes to PCP and other external caregivers in the Community of Care.
- Utilize pharmacy technicians/pharmacists within the ED, at admission and/or discharge for medication reconciliation and patient education/counseling. For high-risk patients, assign a pharmaceutical case management team (pharmacist and pharmacy technician)
- Intensify adoption of advanced discharge and transitional care models to improve hand-offs to and from the hospital (e.g., BOOST, Transitional Care Model), including transmission of updated medication reconciliation to Community of Care entities.
- Build planned medication tapers/discontinuation protocols into systems, where appropriate.

## **PATIENTS/FAMILY CAREGIVERS/SUPPORTERS**

- Implement evidence-based solutions to overcome the barriers/challenges that patients face regarding medication management, including:
  - » Patient resources (financial, transportation, schedules, social support, caregiver/community involvement, other health care providers, etc.).
  - » Patient demographics (primary language, health/technology literacy, ability to determine generic/name-brand, capacity to manage multiple new prescriptions from hospital stay once discharged, education on self-management, etc.).
  - » Aligning goals of care so that patients' desires regarding which medications they take are considered.
  - » Assessing patients' goals of care and reconcile with those of caregivers.
- Determine patient-directed mechanisms and interventions (e.g., electronic personal health record, care coordinators) to measure and enhance patient engagement/motivation.
- Use established and proven programs such as the Diabetes Self-Management Program (DSMP) and Chronic Disease Self-Management Program (CDSMP) models to develop a self-management program for patients regarding their medication regimens.



- Develop a public relations campaign to sensitize the community to the issues and increase consumer engagement.
- Use visiting nurses and other home help professionals to fill the gaps of care (i.e.. when a patient is discharged without designated PCP).
- Incentivize patients not to use multiple pharmacies.
- Use contracting and teach-back methodologies to ensure the patient understands any changes in diagnosis/medication regimen.
- Create communication mechanisms between SNFs and other providers so they understand the prescriber's intent behind the patient's prescriptions and they can convert medications to cheaper alternative/on-formulary ones to provide patient cost savings.
- Coordinate care between Home Care/Hospice/Palliative services.

## **GOVERNMENT/REGULATORY**

- Re-examine laws and regulations relative to the pharmacist and pharmacy technician scope of practice, reimbursement, and participation in collaborative medication management to better enable clinical pharmacy services (including community-based services) to interact with patients at risk of readmission.
- Update laws, where necessary, to allow for all hospitals to discharge patients with several days' worth of new prescriptions.
- Focus on funding and sustainability.
- Create appropriate partnerships with state Departments of Public Health/Health/Social Services.

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