ABSTRACT: 2013 ELAM Institutional Action Project Poster Symposium

Title: SWEET TRANSITIONS: THE COORDINATION OF DIABETES CARE BETWEEN HOSPITAL AND PRIMARY CARE SETTINGS

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Collaborators: UC Medical Center (patients, diabetes team), Cincinnati Center for Clinical Effectiveness & Patient-Centered Research Community Stakeholder Advisory Group, Health Collaborative of Greater Cincinnati, UC College of Arts & Sciences (Technical Communication), UC College of Nursing (Senior Associate Dean, Research), UC Health, VP External Affairs

Background: It is well established that the transition of care between inpatient and ambulatory settings is inadequate, posing a threat to the quality and safety of patient care. This gap in the coordination of care is amplified for hospitalized individuals with diabetes or hyperglycemia since these conditions are common comorbidities but almost never the primary reason for admission. It is estimated that one third of individuals with diabetes remain undiagnosed and in those with recognized diabetes, poor control is common. It has also been demonstrated that hyperglycemia during hospitalization may represent unrecognized diabetes and is associated with increased morbidity, mortality, and readmissions. The early identification of individuals with diabetes or pre-diabetes is of paramount importance because of available and proven interventions that can improve outcomes. Therefore, the development of a systematic process to coordinate care between the hospital and primary care provider can lead to earlier detection of diabetes in those who are at risk and improved outcomes in those with poorly controlled diabetes.

Objectives: Our specific objective is to establish a process for the coordination of diabetes care between hospital and primary care settings that is patient-centered, is responsive to the needs of community providers, and can be implemented broadly in diverse healthcare environments. Additionally, because successful execution of our objective will require robust communication and collaboration within and external to our center, a broader aim is to develop and strengthen mutually beneficial and strategic partnerships across the academic health center (AHC) and community.

Methods/approach:

- Establish collaboration with stakeholders 1) internally within AHC/UC 2) externally across the community
- Design transition-of-care model that 1) leverages efforts/expertise from existing initiatives with similar objectives 2) aligns with institutional strategic priorities
- Obtain external funding to support 1) research related to transition program 2) growth of programs in comparative effectiveness and patient-centered research at UC/AHC.
- Examine effectiveness of transition program using quantitative/qualitative methods. Use findings to refine intervention and inform broad implementation.
- Explore mechanisms to ensure sustainability of transition program (e.g. philanthropy, payor contracts, federal/regional incentives)

Outcomes (Progress-to-date):

- Established initial collaboration with stakeholders
- Designed "Sweet Transitions" – a patient-centered intervention for transition of care in inpatients with possible or poorly controlled diabetes
- Designed qualitative approach to identify key elements of Sweet Transitions that promote application in diverse settings
- Submitted grant proposal for Sweet Transitions to AHRQ (currently under review) under UC/AHC umbrella proposal for "Infrastructure Development Program in Patient-Centered Outcomes Research"
- Contributed to formation of "Cincinnati Center for Clinical Effectiveness & Patient-Centered Research" – a collaborative including community, UC, and AHC
- Identified federally funded initiatives at AHC for which mechanisms/resources already exist to advance transition program

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Collaborators: Lora Arduser, PhD, UC College of Arts & Sciences; Cincinnati Center for Clinical Effectiveness & Patient-Centered Research & Community Stakeholder Advisory Group; Health Collaborative of Greater Cincinnati; UCMC Diabetes Now team; UC College of Nursing Senior Associate Dean of Research; UC Health VP External Affairs

BACKGROUND

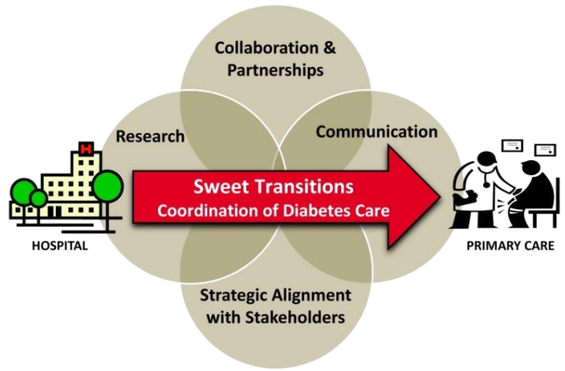
- It is well established that communication and coordination of care between hospital and ambulatory settings is inadequate.
- This gap is amplified for hospitalized individuals with diabetes or hyperglycemia since these conditions are common comorbidities but almost never the primary reason for admission.
- Diabetes remains unrecognized in one-third of those affected and often manifests as hyperglycemia during hospitalization – a condition associated with increased morbidity, mortality, and readmissions
- However, the diagnosis of diabetes cannot be made during hospitalization – follow-up testing is needed.
- Early identification of diabetes or pre-diabetes is critically important because of available and proven interventions that can improve outcomes.
- The systematic coordination of care between hospital and primary care provider can lead to earlier detection of diabetes in those at risk and improved outcomes in those with poorly controlled diabetes.

OBJECTIVES

- To establish a process for the coordination of care between hospital and primary care settings that increases the identification and treatment of unrecognized and poorly-controlled diabetes
  - Patient-centered
  - Responsive to needs of community providers
  - Can be implemented in diverse healthcare environments
- To develop and strengthen mutually beneficial partnerships across the academic health center and community

APPROACH & METHODS

- Develop collaboration & partnerships with stakeholders within academic health center and university, and externally across community
- Design Sweet Transitions model using qualitative and quantitative methods
- Obtain external funding
- Implement Sweet Transitions while leveraging effort, expertise, and resources from existing initiatives
- Examine effectiveness of Sweet Transitions using quantitative and qualitative methods. Use findings to refine intervention and inform broad implementation.
- Explore mechanisms to ensure sustainability of program. Potential sources include philanthropy, payer contracts, federal/regional incentives and foundations, and industry



OUTCOMES & EVALUATION

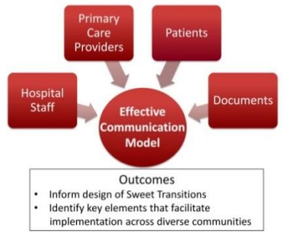
1. Collaboration & Partnerships Formed

- Internal (University of Cincinnati, UC Health)
  - UC Medical Center Diabetes Now Program
  - College of Arts & Sciences, Department of English
  - College of Nursing , Research and Education
  - UC Health External Affairs
- External
  - Cincinnati Center for Clinical Effectiveness & Patient-Centered Research (founding member)
  - American Diabetes Association, Greater Cincinnati (invited to serve on Community Leadership board)
  - Health Collaborative of Greater Cincinnati
  - Healthcare Access Now
  - Health Bridge health information exchange system

2. Research: "Sweet Transitions" Proposal Written & Submitted for External Funding

- One of 4 sub-projects under umbrella proposal, "Infrastructure Development Program in Patient-Centered Outcomes Research"
- Qualitative and quantitative approach

Qualitative: used to develop communication models & patient-centered intervention
- Apply principles of participatory design & conduct interviews
- Gather & analyze data about how actual stakeholders work in order to develop intervention based on user needs in real-world contexts

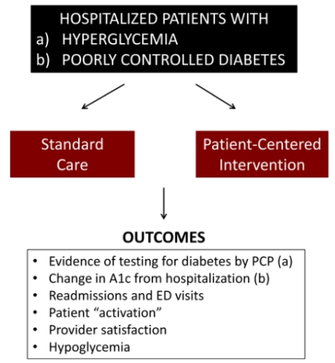


Example #1: PCPs suggest educational YouTube© video as part of diabetes discharge communication

Example #2: Design of Sweet Transitions Patient-Centered Intervention

1. Diabetes Discharge Summary
2. Diabetes Nurse Intervention of Patient's Choice
3. Phone Call to PCP

Quantitative: determine effectiveness of Sweet Transitions intervention to improve diabetes outcomes



3. Strategic Alignment with Stakeholders

- Excellence in patient-centered care
- Research programs in clinical effectiveness & patient-centered outcomes
- Interdisciplinary collaboration across UC colleges & departments
- A UC Health Community Health Needs Assessment project

Aligns with "Plan 2017" priority initiatives

- Expand diabetes & metabolic wellness programs: Diabetes & Metabolic Diseases Institute
- Improve patient & family experiences
- Expand research within Institutes
- Prepare for healthcare reform
- Create academic health center image-building campaign
- Develop new partnerships & affiliations
- Primary care physician recruitment

4. Identified "Found Pilots" Initiatives at UCMC

- "ImpACT: Accountable Care Transformation" to reduce readmissions in individuals with CHF
- CMS funded "Council on Aging Care Transitions" coaches hospitalized seniors
- Health Care Access Now, Chronic Disease Care Coordination Pathway Collaborative

CHALLENGES & QUESTIONS

- Collaborations & Partnerships
  - Primary care physicians frustrated
  - Regional "transformational project overload"
  - Meaningful metrics for evaluating partnerships?
- Research
  - Ideal study design on continuum of "plan-do-study-act" → randomized controlled trial?
  - Valid and reliable outcomes measurement given numerous regional healthcare systems?
  - Which first: qualitative or quantitative approach?
- Strategic alignment
  - Widespread implementation vs. respect research design?
  - Best time to approach payers?

NEXT STEPS

- Complete design & begin implementation
- Continue dialogue & work with collaborators
- Expand partnerships
- Develop & submit related research proposals
- Explore sustainable funding: local foundations & industry, philanthropy, payer contracts

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Presented at the 2013 ELAM® Leaders Forum

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