Advancing Community Pharmacy Practice through Partnerships

The Rest of the Story…

University of Pittsburgh School of Pharmacy

Mission
The School of Pharmacy is committed to improving health through excellence, innovation, and leadership in education, research, patient care, and service.

Enhancing the Health of the Community through Partnerships

Rite Aid/University of Pittsburgh Partnership - Rite Care

- Create and implement an MTM service model
  - Standardized
  - Set expectation of patients and physicians
  - Replicable
  - Scalable
  - Sustainable
- Train pharmacists to build an MTM practice
- Track/report outcomes

Faculty: Drs. Kroboth, Smith, McGivney, McGrath

Lessons Learned

<table>
<thead>
<tr>
<th>Goals</th>
<th>Lessons Learned</th>
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<tbody>
<tr>
<td>Standardized</td>
<td>Training key Standard documentation software Involvement at all levels of company</td>
</tr>
<tr>
<td>Set expectations</td>
<td>Patients quickly embrace service</td>
</tr>
<tr>
<td>Replicable</td>
<td>Training key Need more pharmacists Need consistent compensation</td>
</tr>
<tr>
<td>Scalable</td>
<td>Need more examples in practice Need more pharmacists Need advocacy for payment Need consistent compensation</td>
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Impactful, sustainable change happens locally first

Foundation: Student Pharmacists

- 2004: Silver Scripts (P1)
  - Learning patient needs
- 2005: Community Practice Training [EL] (P2)
  - Practice development
- 2008: Profession of Pharmacy 1-4 (P1 & P2)
  - Patient-centered care Medication experience Standardized patients

Faculty: Drs. Smith, McGivney, Pater, Hall, McGrath, Meyer, Jonkman, & many others/residents/students
Staff: C. Hill, R Fry, S. Parnell, S. Martin

Training Tomorrow’s Leaders

- 2006: PGY1 Community Residency Program
  - 13 residents to date (11 graduates) 5 faculty, 5 practitioners, 3 PGY2
  - 7 grant funded ($50,100) 4 publications; 2 under review
- 2007: Community Research Fellowship
  - 1 Fellow to date 2 grants ($48,000) 3 publications

Faculty: McGivney, Smith, McGrath, Fabian, Pater, Hall, Pringle, Coker, Farrah, Klatt, Jonkman, Connor
Staff: C. Hill, R Fry, S. Parnell
Training Tomorrow’s Leaders

- **TOP TIER**
  - Training Outpatient Pharmacists Techniques In Evidence-based Research
- Collaboration with PA Community Residencies
  - University of Pittsburgh, Temple, Wilkes, Duquesne
- Training techniques:
  - On-line/teleconference training
  - Live meetings: PPA and APhA
- Results:
  - 11/11 APhA abstracts accepted
  - 5/6 Applied/received foundation grants

Faculty: Pringle, McGivney, Smith, McGrath, Fabian
Staff: C. Hill, R. Fry, S. Parish

Engaging Pharmacists in Pennsylvania

- Coalition of Schools:
  - Duquesne University
  - Jefferson University
  - Lake Erie College of Osteopathic Medicine
  - Philadelphia College of Pharmacy
  - Temple University
  - University of Pittsburgh
  - Wilkes University
- Pennsylvania Pharmacists Association

www.papharmacistcare.com

PA Project Overview

<table>
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<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<tbody>
<tr>
<td><strong>On-Line Training</strong> Statewide</td>
<td><strong>Live Training</strong> Statewide</td>
<td>Student Curriculum 7 Schools On-going</td>
</tr>
<tr>
<td>14.25 CE 600+ trained</td>
<td>7.25 CE 198 trained</td>
<td>PA Coalition</td>
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<tr>
<td><strong>Launch Dates</strong></td>
<td><strong>Launch Dates</strong></td>
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<tr>
<td>February 2009</td>
<td>October 2009</td>
<td>August 2011</td>
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Creating a Replicable, Scalable, Sustainable Model of Care

**SCRIPT:** Successful Collaborative Relationships to Improve Patient care

UPMC St. Margaret UPMC HEALTH PLAN

Unicode of Pittsburgh School of Pharmacy

<table>
<thead>
<tr>
<th>Partnership</th>
<th>Lesson Learned</th>
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<tr>
<td>Underserved</td>
<td>Pharmacist-provided patient care adds value to an interprofessional team</td>
</tr>
<tr>
<td>Rite Care</td>
<td>A standardized model sets expectations of patients and physicians</td>
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<tr>
<td>PA Project</td>
<td>Training to build pharmacist practices can be standardized with the intention to develop replicable practices</td>
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<tr>
<td>SCRIPT</td>
<td>Looking to create a scalable and sustainable practice model</td>
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Advancing Community-based Research

Results

- 65+ stores significantly improved diabetes medication adherence across 9 data cycles
- 13 stores – Beta Blockers
- 7 Stores – ACE Inhibitors
- 4 Stores – Dyslipidemia meds
- 2 Stores – Calcium Channel blockers

Control store data analyses scheduled this fall

Study of Medication Adherence and Its Relationship to Therapeutic Alliance (SMARTA)

- 6 pharmacists (Kerr Drug) provided MTM services with ORS and SRS.
- Question: Do patients with MTM+ORS/SRS show better adherence to medications than others? (MTM only, random sample of claims data)
  - Antihypertensives
  - Antlipidemics
  - Anti-diabetic agents
- Main Outcome Measures = PDC and PDC80

New Awards

- Oregon Department of Justice: Developing a National Curriculum for Family Medicine Residencies on Evidence Based Prescribing
- Department of Defense: Evaluating an Automated Pharmacy Management System within Military Health Settings

PQA: Phase II Demonstration Project: Using Screening and Brief Interventions within Community Pharmacies to Improve Medication Adherence

- 117 Pharmacies
- 300+ Pharmacists Trained
- 60,000+ Patients
- Screening for Adherence
- Brief Intervention with Patient
- ASPIRE® Portal
- On-going Technical Assistance

Results

- MTM+ORS/SRS: n=117, average age=76.4
- MTM Only: n=146, average age= 76.2
- MTM+ORS/SRS= 3.1 percentage point increase in overall PDC (p<.001) than control
- MTM+ORS/SRS= 4.6 percentage point increase in overall PDC80 (p<.02) than control
New Proposals

- NACDS: Pharmacy/Medical Home Demonstration
- MERCK: RCT to Test Medication Adherence Intervention Models

Advancing Education beyond the classroom

DM Educate™ dmeducate.org

- Web-based, multidisciplinary diabetes education course
  - National experts, material updated quarterly
  - New material in development: behavioral change, practice cases
- Initial support: educational grant from NovoNordisk
- Pharmacy Schools (est. 2006)
  - 87/129 Schools in US/Puerto Rico
  - 11,000 students completed course as of April 2011
  - Some use every semester (UNC)
- 7 International (England, BC, UAE, Lebanon, Israel, India, Brazil)
- Practitioners – CE accreditation (APCE, ANCC, CDR) (est. 2007)
  - 25 Doctors, 3 grocery pharmacy chains, 3 retail chains
  - 229 Nurses
  - 90 Dieticians
- Recognition/Opportunities
  - Research 3 education based publications (AJPE, Curr in Pharm Teach Learn)
  - Local, State and National Meeting presentations
  - Partnering with state national organizations to provide training
  - Utilized by chain pharmacies, other groups as dedicated training method
- Faculty Lead: Scott Drab; Pitt Faculty/Staff: Randy Smith, Cheri Hill, Susan Meyer, Deanne Hall, Shelby Connan, Tom Waters, Amy Donihi, Samantha Sommer

Advancing Pharmacist Patient Care Practice

UPMC Anticoagulation Service

- Est. in 1995; now over 1300 patients
- Educational site for students and residents
- Led eRecord anticoagulation documentation for UPMC
- New pharmacy liaison to the eRecord team
- Resident Research
  - Evaluation of Time in Therapeutic Range
  - Collaboration with UPMC Health Plan
- Research
  - Pharmacists management showed less hospitalizations, ER visits and ADRs
  - Over $3000 per year per patient cost savings
- Recognition
  - Invited CDR presentation
  - Publications: Pharmacotherapy and J Pharm Technology
  - Future Opportunities
    - Collaboration on service expansion, integration with new anticoagulants
    - Research: Genomics, new anticoagulants
    - Gateway for expansion of other ambulatory pharmacy services

Pharmacist Provided Immunization Program

- Est in 2007; now 38 certified pharmacists
- Revenue generating for Falk Pharmacy
- Provided over 3000 influenza vaccinations last year
  - 1668 University Faculty/Staff, 670 University Students
  - 556 UPMC Employees, 195 Other
- Recognition
  - University Benefits Office Administration
  - 44-65 yo demographic vaccination rate ↑ from 14% in 2006 to 34% in 2010
  - Pharmacy representative appointed to the Medical Advisory Committee
  - UPMC
  - Outpatient Pharmacy representation now permanent part of Flu Planning Group and Emergency Preparedness from leadership in H1N1 planning
The Grace Lamsam Pharmacy Program

Faculty: Connor, Jonkman, Pschirer, Schonder, Corman, Fabian, Pater, Donihi (past/current volunteers)
Staff: A. Schmotzer, R. Fry, Mary Herbert

GLPP partners

Health Care for the Homeless Pittsburgh
Birmingham Clinic/PHCUP
North Side Christian Health Center
Matilda Theiss Health Center
Salvation Army Harbor Light Center
Squirrel Hill Health Center
Operation Safety Net

GLPP Initiatives

- HRSA Patient Safety and Clinical Pharmacy Services Collaborative
  - $5000 AACP grant to create video highlighting interprofessional care
  - 3 Patient Safety and Clinical Outcome awards
  - Posters and invited presentations
- MTM, DSM, and smoking cessation programs
  - $159,000 total in grants from Rite Aid Foundation
  - $25,000 grant from Snee-Reinhardt Foundation
  - Posters and presentations
- Residencies
  - PGY2 Underserved Care (2010)
  - PGY2 Underserved Care and Global Health (2011)