

Telepharmacy: A New Frontier in Patient Care

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PRESBYTERIAN COLLEGE
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Project History

**(2009) Initial
BCBS/SCFCA
grant awarded for
clinical pharmacy
services at GSFC**

**(2013-2014) Redesign
of grant funding to
support the
development and use
of clinical pharmacy
services for multiple
free clinics**

**(2012) 2nd
grant awarded
for dispensing
services SCFCs
throughout SC**



Recognizing Problems

SC ranked **4th highest** in nation for % of population with diabetes in 2013

Medical costs for people with diabetes are **twice as high** as for people without diabetes.

Low medication adherence is associated with higher diabetes-related medical costs and hospitalizations

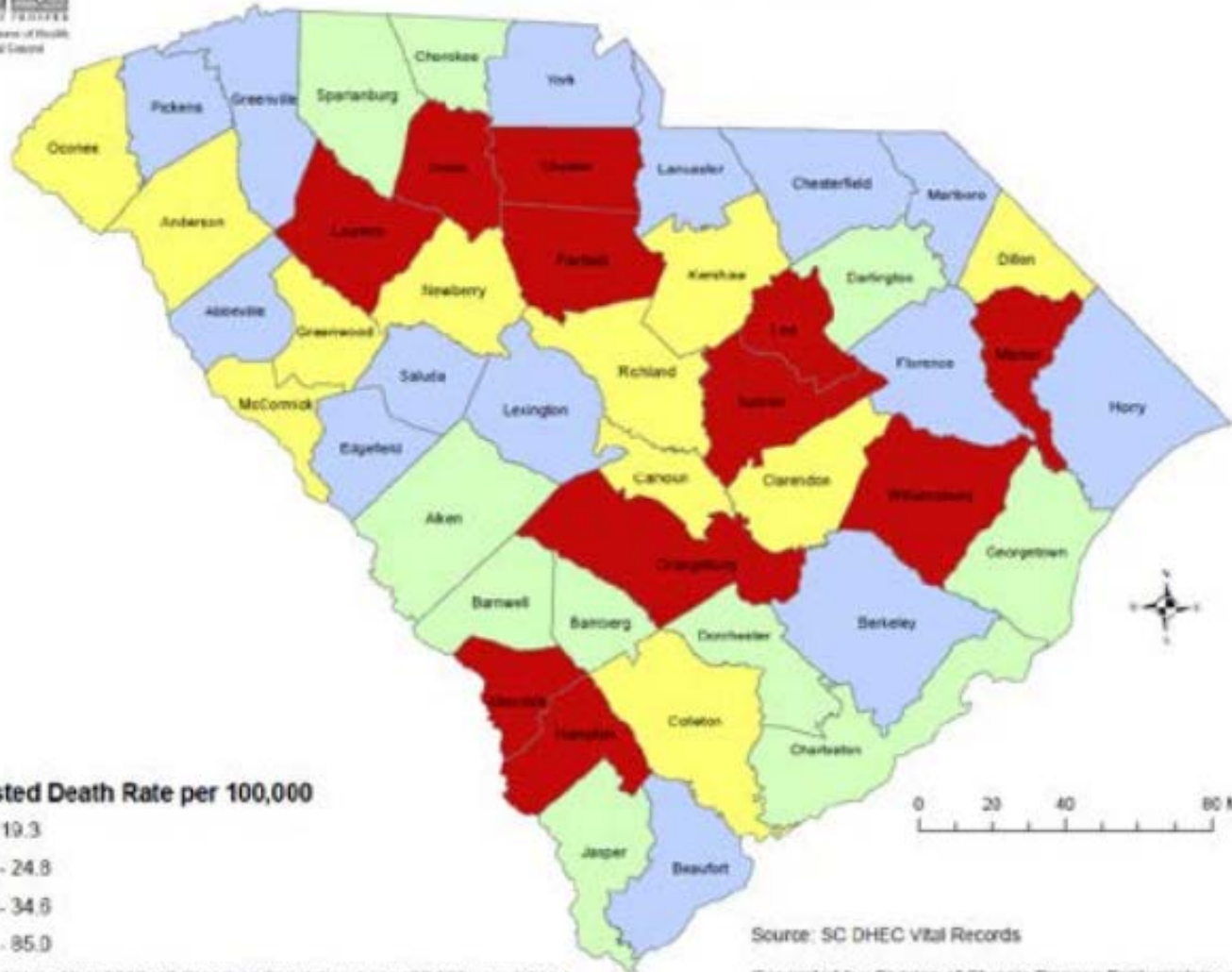
In 2013, 25,000 diabetes-related hospitalization and ER visits in SC costing > \$367 million

Cost of care for patients in SC with diabetes is expected to exceed \$3 billion in 2015

2 out of 5 persons with diabetes have not taken a diabetes self-management class



Diabetes Death Rate,* 2013



Age-adjusted Death Rate per 100,000

- 9.8 - 19.3
- 19.4 - 24.8
- 24.9 - 34.6
- 34.7 - 85.0

* Age-adjusted Uses Year 2000 US Standard Population (per 100,000 population)

Source: SC DHEC Vital Records

Generated by: Division of Chronic Disease Epidemiology, 12/2014



Recognizing Problems

| SCFCA Population | 36,747 | % Of Population |
|-------------------------------------|---------------|------------------------|
| Hypertension | 16,647 | 45.3% |
| Diabetes | 10,881 | 29.6% |
| COPD | 3,286 | 8.9% |
| Smokers | 10,682 | 29.06% |
| Other Tobacco Products | 425 | 1.15% |
| Overweight: BMI 25.0 to 29.9 | 11,252 | 30.60% |
| Obese: BMI>30 | 11,745 | 31.90% |

*Data provided by SCFCA Annual Report



A Potential Solution: Telepharmacy

Telemedicine

- Use of telecommunication to provide clinical healthcare at a distance



Telepharmacy

- “...the provision of Pharmacist Care by registered Pharmacies and Pharmacists through the use of telecommunications or other technologies to patients or their agents at distances that are located within the U.S. jurisdictions.”¹

1. Model State Pharmacy Act and Model Rules of the National Association of Boards of Pharmacy (Model Act)



Telepharmacy Proposal

Part 1- Telepharmacy Clinical Services

- Phase 1- Diabetes Education
 - Pilot- 1 Upstate free clinics (11/14- 4/15)
 - Expand to 2-4 Upstate free clinics throughout remainder of 2015.
- Phase 2- Hypertension Coaching

Part 2- Drug Information Request Portal

- Available to all 51 SC free clinics after a 12-week roll out to 15 Upstate free clinics

Drug Information Requests

Providers of the SC Free Medical Clinic are invited to use the request form below to ask non-urgent drug information question. Every attempt will be made to respond to the request in a timely fashion.

If your request is urgent, such as a potential poisoning or overdose, please contact the Poison Center by calling 1-800-222-1222.

Full Name *

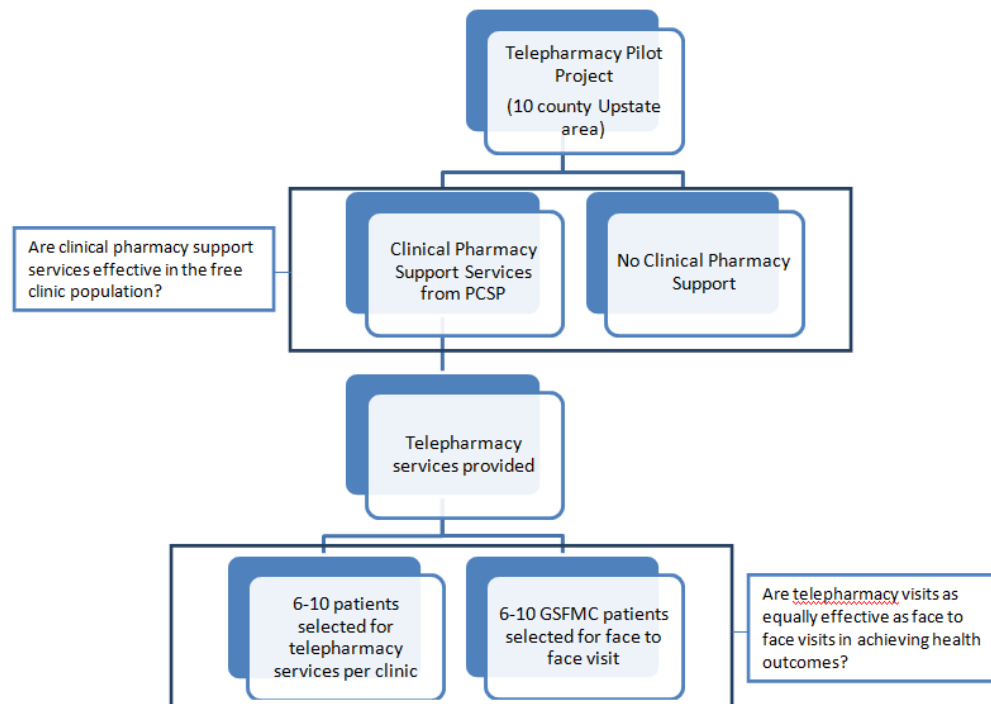
Title *

Business/Institution *



Research Question

- Are telepharmacy services as equally effective as face-to-face clinical pharmacy services in achieving health outcomes?

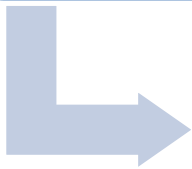




Methods

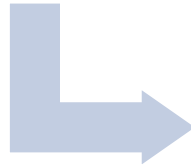
Applications sent to upstate clinics through SCFCA

- Ensured our needs would be met
- Allowed clinics to express challenges
- Stated expectations and timeline of the program



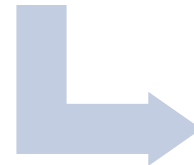
2 applications returned

- One site selected to pilot



Planning Meetings

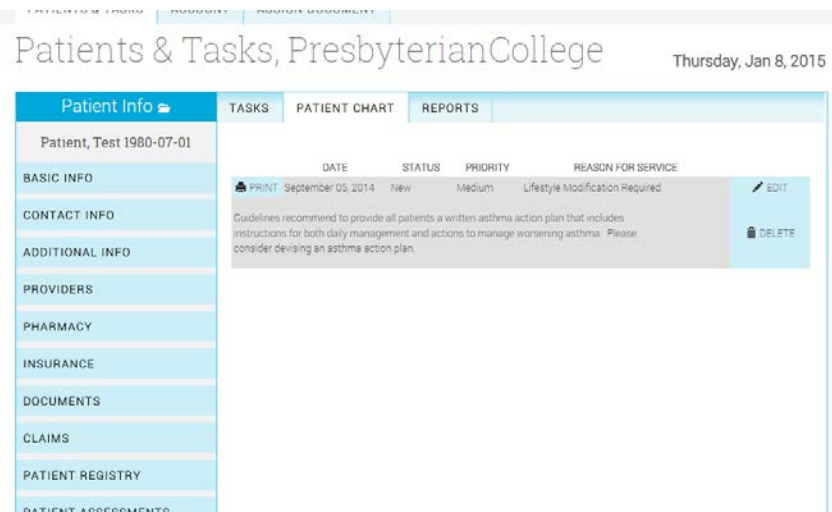
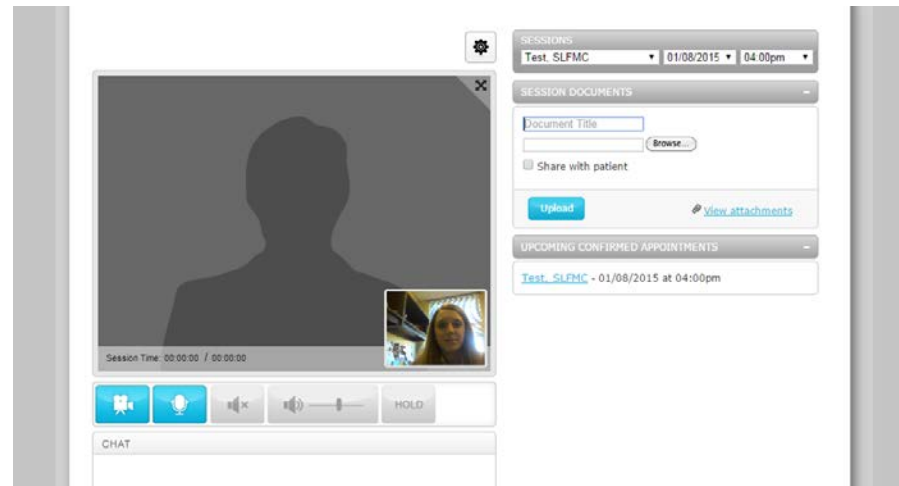
- Joint meetings to find methods that would be acceptable and easily duplicated



Equipment Installation

Equipment

- Samsung® Chromebook
 - Built in webcam
- CloudVisit TelemedicineSM
 - Telemedicine software
 - HIPAA compliant
 - Scheduling capabilities
 - Allows document sharing
- MTMPath Software
 - MTM software designed for pharmacists
 - Data collection and reporting
 - Tracks recommendations





Recruitment

Inclusion

- ≥ 18 years
- diagnosis of pre-diabetes (A1c 5.7-6.4%)
- uncontrolled diabetes (A1c $\geq 7\%$)
- newly diagnosed diabetes (A1c $\geq 6.5\%$)

Exclusion

- Pregnancy
- < 18 years



Procedures

Patient identified by free clinic



Referral form sent to PCSP Wellness Center



Appointment scheduled



Initial assessment (60 minutes)



Follow-up encounters (30 minutes)



Outcomes

Primary

- Change from baseline
 - A1c
 - Cholesterol
 - BP
 - BMI

Secondary

- At baseline vs. end of follow-up period
 - % on appropriate statin
 - % on appropriate aspirin
 - % received eye, dental, and foot exam
- Medication adherence
- Modification of CV risk factors
- # medication-related interventions
- # medication-related interventions accepted by PCP



Key Implementation Findings & Next Steps

- Barriers
 - Internet speed/image quality
 - Clinic schedule vs. PCSP Wellness Center schedule
 - Staff training
- Next steps
 - Expand to additional clinic sites
 - Assess patient and clinic satisfaction
 - Evaluate outcomes

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