# Innovative Care Delivery Models: Pharmacy & Health Systems Collaborations

**Population Health and Care Coordination Colloquium**

February 28, 2012

By
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Northwestern Memorial® Physicians Group

# Background

# Northwestern Memorial HealthCare

## *"… Where the patients comes first"*

Feinberg and Galter Pavilions

Prentice Women's Hospital

Northwestern Lake Forest Hospital

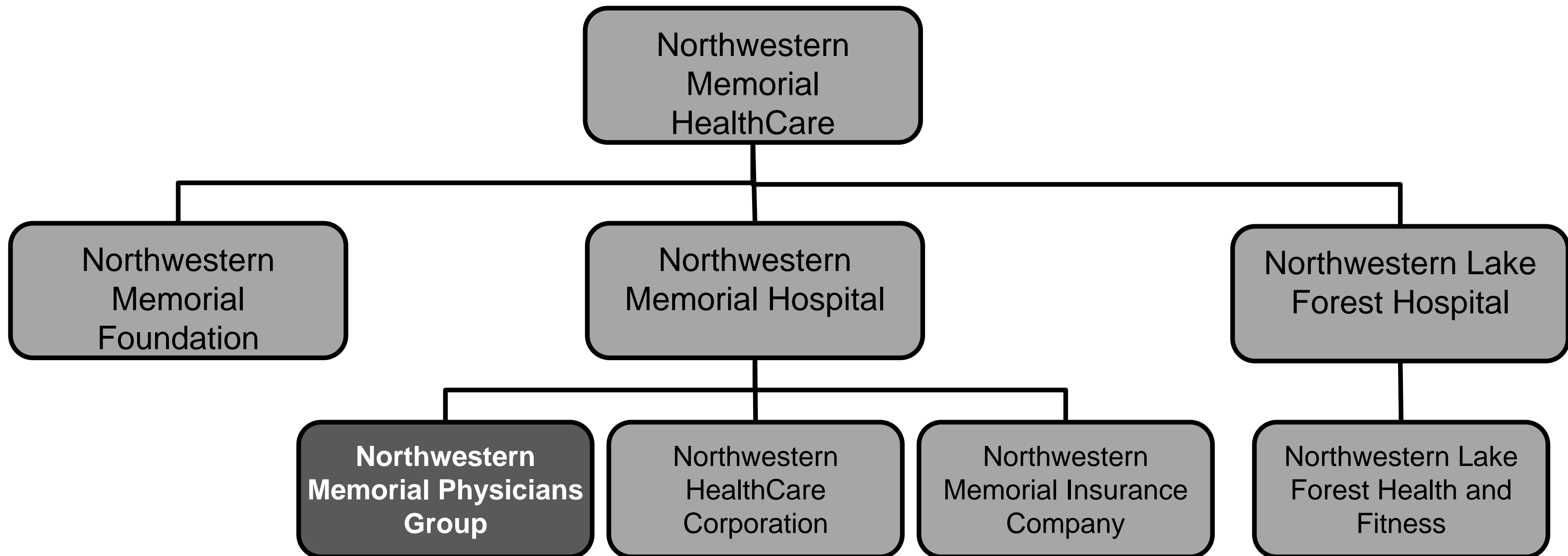
Grayslake Campus

- Primary clinical affiliate of Northwestern University's Feinberg School of Medicine
- Northwestern Memorial Hospital (NMH) is a 894-bed nationally recognized academic medical center hospital and a national leader in quality and consumer preference
- Northwestern Lake Forest Hospital (NLFH) is a 215-bed community hospital with 600 physicians board-certified in 68 medical specialties. Clinical services are delivered at the hospital's Lake Forest and Grayslake campuses and at facilities throughout Lake County.
- Northwestern Memorial Foundation (NMF) provides philanthropic support for Northwestern Memorial through fundraising and grantmaking. During fiscal year 2008, the foundation raised $29.5 million and made grants of $38.4 million to hospital programs, research, education and community services.
- **Northwestern Memorial Physicians Group (NMPG) is a primary care medical group practice with 120 physicians and allied healthcare providers. Patient care and service are provided in 16 medical offices located in the Chicago neighborhoods**
- Northwestern HealthCare Corporation (NHC) contracts with managed care payors on behalf of the hospital's medical staff. During fiscal year 2008, its 18 payor agreements provided 4 million Chicago-area residents with access to physicians on the medical staff at Northwestern Memorial.

# Current Corporate Structure

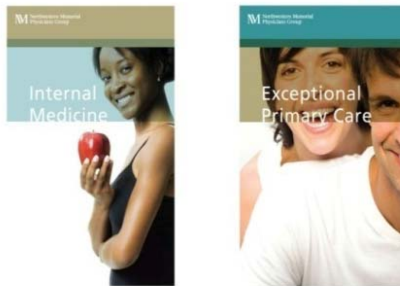
## *Northwestern Memorial HealthCare*

Northwestern Memorial Physicians Group is a wholly owned subsidiary of Northwestern Memorial Hospital



# Northwestern Memorial Physicians Group
## core business

*Northwestern Memorial Physicians Group offers the specialties of internal medicine, obstetrics and gynecology, pediatrics, dermatology, occupational medicine, integrative medicine, alternative medicine, wellness and disease prevention &executive health.*



**Traditional Primary Care Programs**
- Internal Medicine
- Pediatrics
- OB/Gyne
- Dermatology

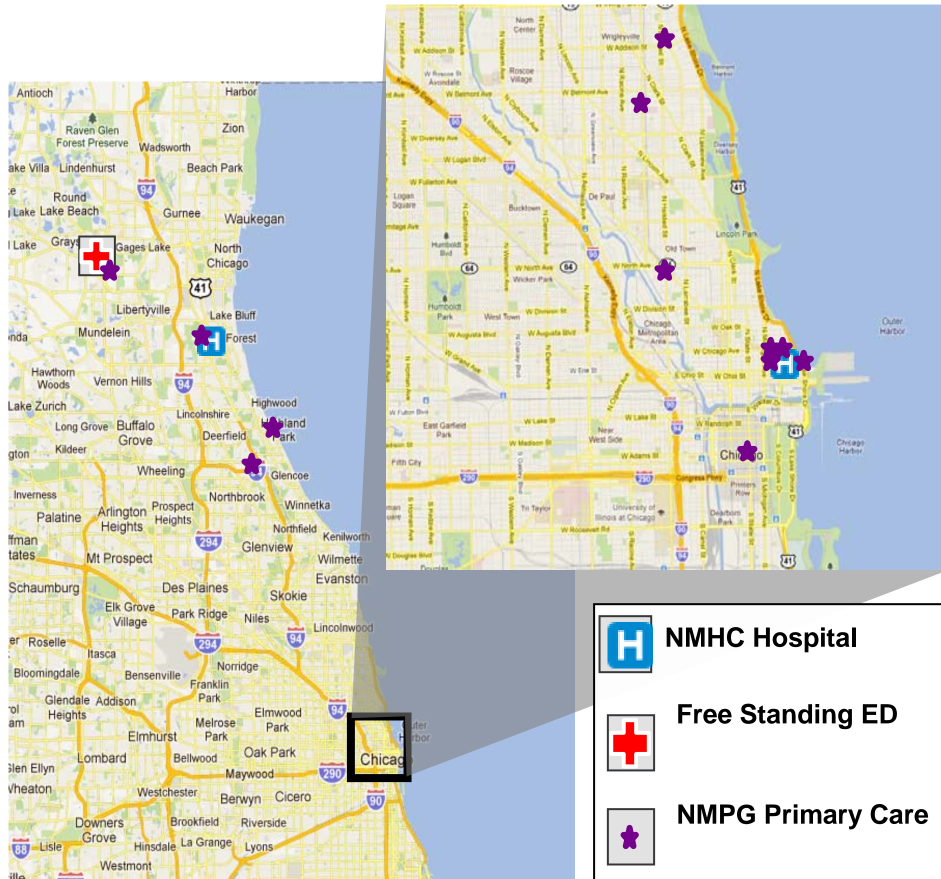
**Health Promotion & Corporate Services Division**
- Occupational medicine
- Travel medicine
- Alternative medicine
- Wellness programs
- Executive health
- Worksite clinics

**Hospital-Based Programs**
- Hospital Medicine
- OB Triage
- OB Hospitalists

# Northwestern Memorial Physicians Group

## Background

NMPG operates 16 unique locations in Chicago and the northern suburbs in support of Northwestern Memorial HealthCare Hospitals




- NMPG physicians are on the medical staff at Northwestern Memorial Hospital, Children's Memorial Hospital or Northwestern Lake Forest Hospital and are faculty members of Northwestern University's Feinberg School of Medicine.

- Patient care and service are provided in 16 medical offices located in the Chicago neighborhoods of Streeterville, Bucktown, Lincoln Park, the Loop, River North and in north suburban Northbrook, Lake Forest, Highland Park and Grayslake.

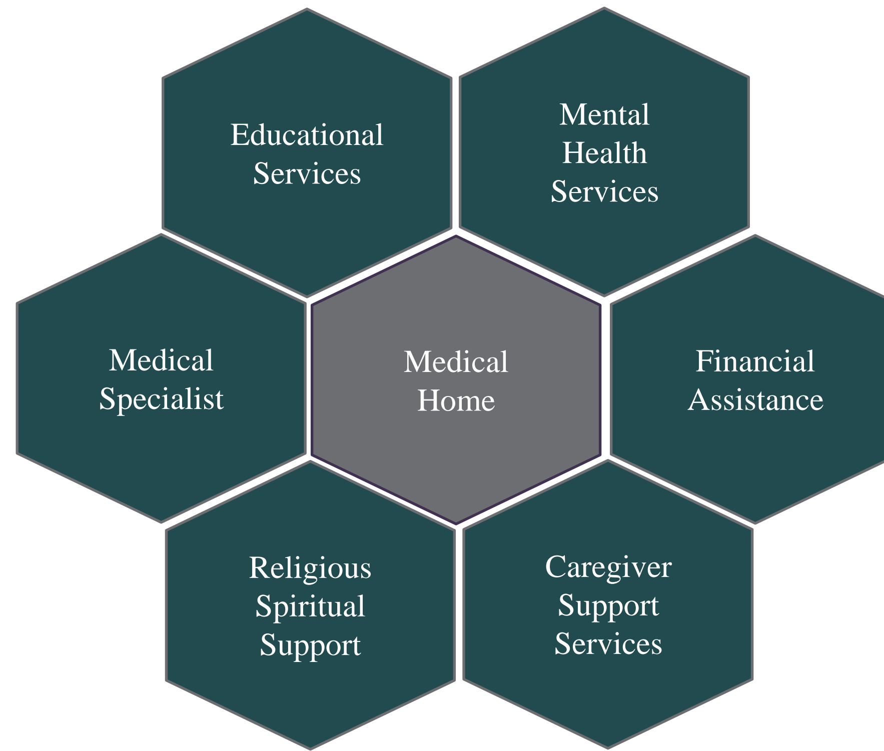
- NMPG provided nearly 350,000 patient visits during FY 2010.

# Innovations in Primary Care

# Innovating Primary Care

## The traditional medical home model

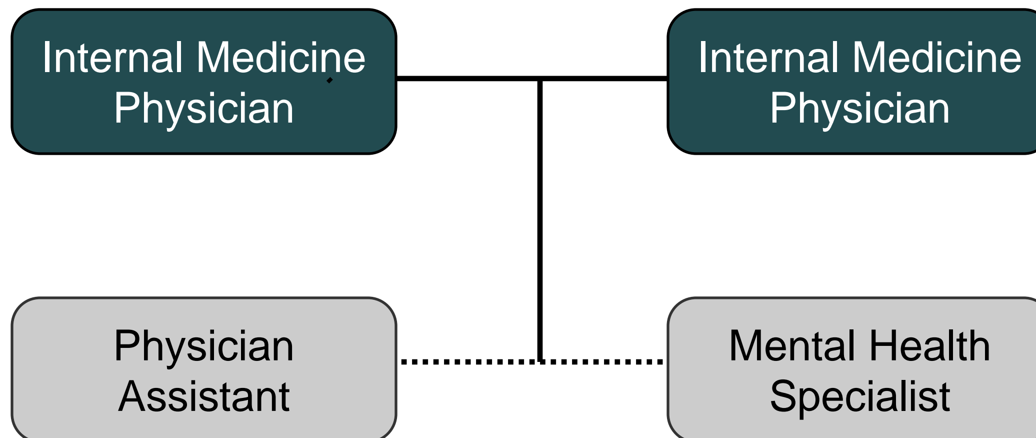
The patient-centered medical home is a model for care provided by physician practices that seeks to strengthen the physician-patient relationship by replacing episodic care based on illnesses and patient complaints with coordinated care and a long-term healing relationship



# Innovating Primary Care

## *The team model at NMPG's SONO office*

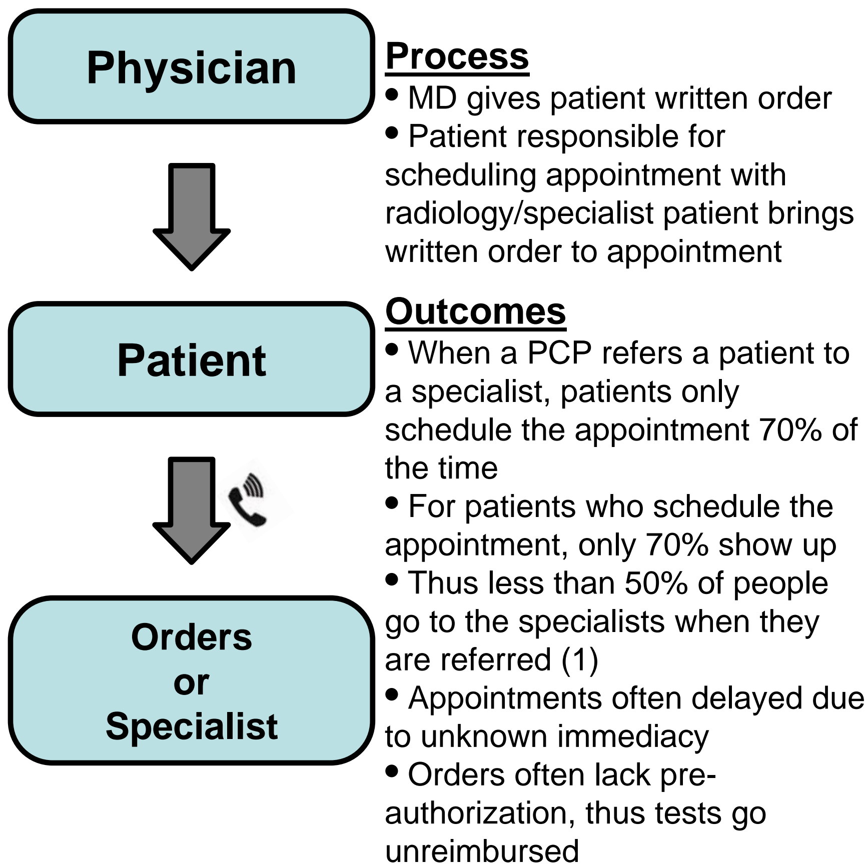
Physician extenders, such as physician assistants and nurse practitioners, enable practices to treat more patients at lower cost

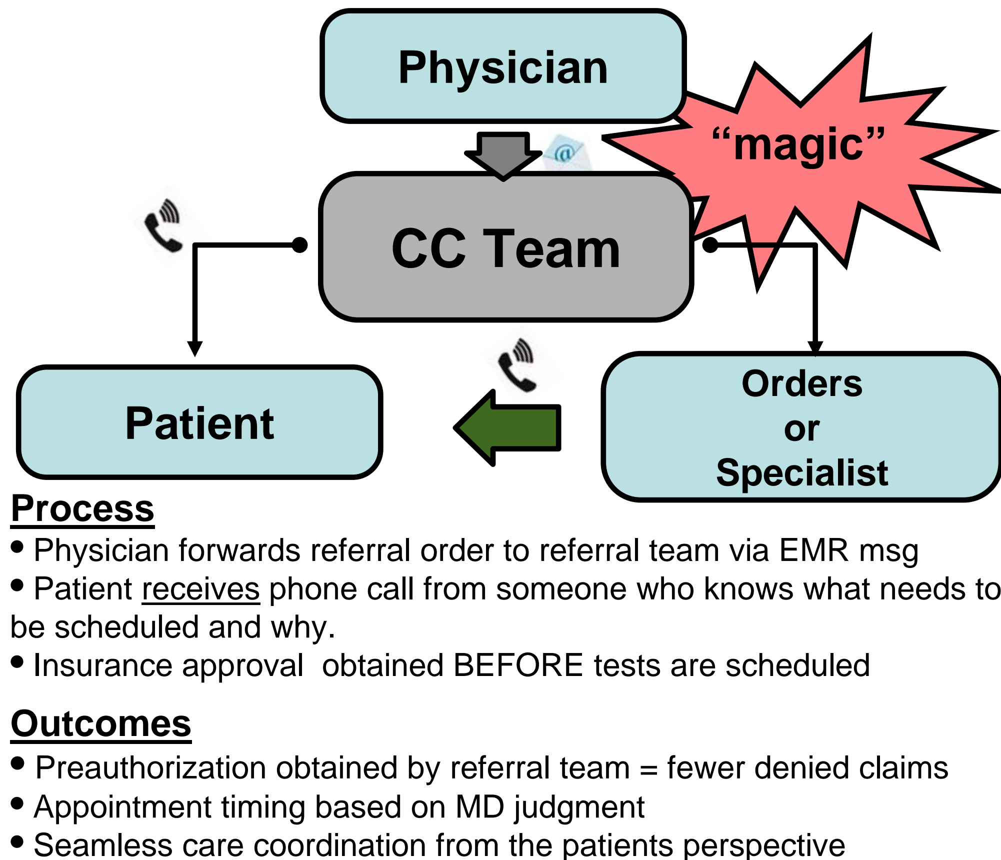



"When you need a physician, you will see a physician"

# Innovating in Primary Care

*EMR messaging & The Care Coordination Team*




(1) Reference from Regenstrief Institute Study: http://www.marketwatch.com/story/doctors-work-to-reduce-costly-patient-no-shows-2010-04-22?pagenumber=1

# Innovating Primary Care

## *Care Coordination Tools*

- **Referral Authorization (RA)**
  - Orders: RA <u>before</u> scheduling the test
  - Consults: RA <u>after</u> appointment is scheduled
- **Scheduling appointments**
  - Specific Time-Frame
  - Specific Order/Sequencing”)
- **Chart Review**
  - At Beginning: Ensure all notes, labs, etc… completed
  - At End:  Ensure all tasks completed (“Closed Loop”)
- **Patient Contact**
  - At Beginning: Reassurance, Education
  - At End:  Ensure all tasks completed (“Closed Loop”)

# Innovating Primary Care

*Clinical Pathways*

**New Issues**

- Hematuria
- Atrial Fibrillation
- Cancer
- Thyroid Nodule
- Lung Nodule
- Renal Insufficiency
- Pelvic Pain
- Malignant Melanoma
- New Hypertension

**Chronic Issue (Tune-Ups)**

- Diabetes
- Hypertension
- High Cholesterol
- Obesity
- Asthma
- Alopecia
- Narcotic Abuse

# Innovating Primary Care

*Example: Inflection Navigator*

This protocol is for patients with: (1) newly diagnosed cancer, (2) very high suspicion of cancer (3) Cancer and who are new to the Northwestern System.

## CANCER PATHWAY STEPS

**1.Referral to the Lurie Cancer Center.**

•Lurie Cancer Center will call the patient to set up an appointment.

**2.Connect patient with Lurie Supportive Oncology group.**

•This group helps patients and their families with financial, emotional and other support needs.

**3.NMH Care Coordination will inform all relevant MDs:**

•The NMPG Care Coordinator will help the patient contact other NMH physicians about their new cancer diagnosis.

**4.Education about Second Opinion Workflow:**

•The patient will get a document explaining how to obtain all their records and materials from Northwestern

**5. Follow-up**

•The NMPG Care Coordinator will call the patient at 4 weeks to confirm everything has been done.

## PCO Message Template

**PATHWAY – Cancer (Lurie/NMFF)**

Send to NMPGPool, IMReferrals

PATIENT CONTACT INFO
Phone Number:

CLINICAL HISTORY
Details:

PHYSICIAN PREFERENCE (if applicable)
Physician Name:
[ ] ONLY refer to this specific physician, regardless of timeframe

CANCER PATHWAY STEPS
* **Referral to the Lurie Cancer Center.** Their triage nurses will call the patient to set up an appointment. If needed, a Lurie Oncologist will contact you for further details.
* **Contact info for the Lurie Supportive Oncology group.** This group helps patients and their families with financial, emotional and other support needs.
* **NMH Care Coordination:** Patient will be asked if they want their other NMH physicians notified about their new cancer diagnosis. If so, then the NMPG Care Coordinator will help the patient contact those physicians.
* **Education about Second Opinion Workflow:** If pursuing a second opinion, the patient will get a document explaining how to obtain all their records and materials from Northwestern (e.g. Medical Records, Reports, Path slides, Radiology CDs).

EXPLANATION FOR ORDERING PHYSICIAN
* This protocol is for a patient with newly diagnosed cancer, or a patient with a very high suspicion of cancer (e.g. abnormal CT scan), or any cancer patient who is new to the Northwestern System.
* The Lurie Center Triage Nurse will review the case:
--- If the cancer source is clear, they will make an appointment with an oncologist specializing in that area.
--- If the cancer source is unclear, they will review with an oncologist - and that oncologist may call you for further clarification and possibly recommend further testing before the patient is seen.
* The NMPG Navigator will send you a message to let you know how the patient is doing with the steps in this pathway.

*Physicians- Do not write anything below this line*
**************************************************************************
*For NMPG Referral Team Only*
* Forward this PCO message to "NMFFPOOL, CONSULT" and "NMPGPOOL, NAVIGATOR"
* Get approval for the Oncologist appointment once details known
**********************************************************************
*For NMFF Consult Team Only*
* Contact the Lurie Cancer Intake Nurses
* Once an Oncologist appointment has been set, please notify all three:
--- The Ordering Physician
--- "NMPGPOOL, IMREFERRALS"
--- "NMPGPOOL, NAVIGATOR"
--- If no Oncology appointment has been made after 2 weeks, please notify the Ordering Physician

Pathway_Cancer_First_Lurie9/8/2009 10:01:00 PM Page 1 of 1

# Innovating Primary Care

*Example: Tune-up clinic*

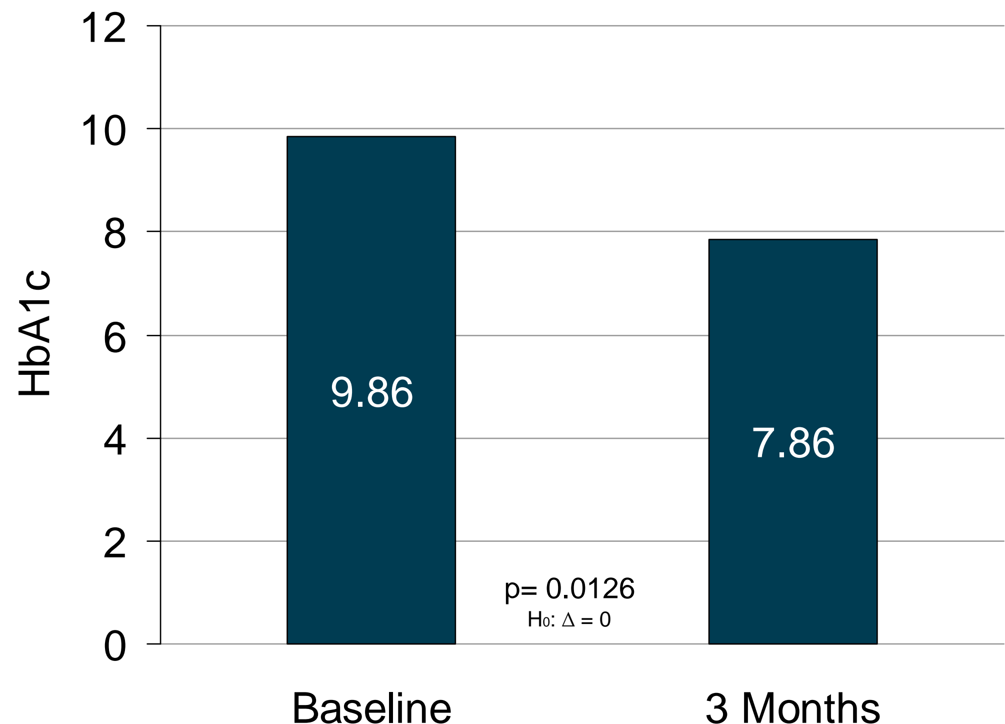
Preliminary results of the Diabetes tune-up project show a 20% drop in the average HbA1c level of patients enrolled in the project

## Intervention

•330 High-risk Diabetics (HbA1C>9) were contacted by their Physician and encouraged to visit the NMFF Endocrinology Diabetes Tune-up clinic (330/2500 pts)

•Approximately 30-40% of identified patients agreed to engage with the clinic.

**Every 1 point drop in HbA1C reduces risk of diabetes complications (e.g. admits) by 40%!**



# Innovations in Primary Care

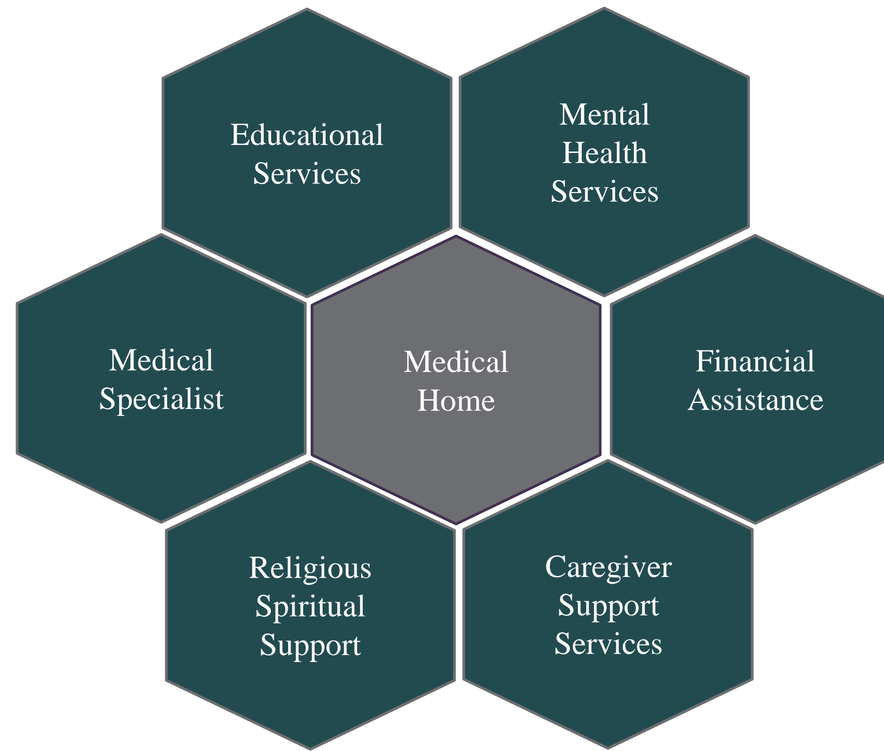
## NMPG Walgreens Pilot

Stronger Coordination between Pharmacy and Primary Care Providers

# Innovating Primary Care

## The traditional medical home model

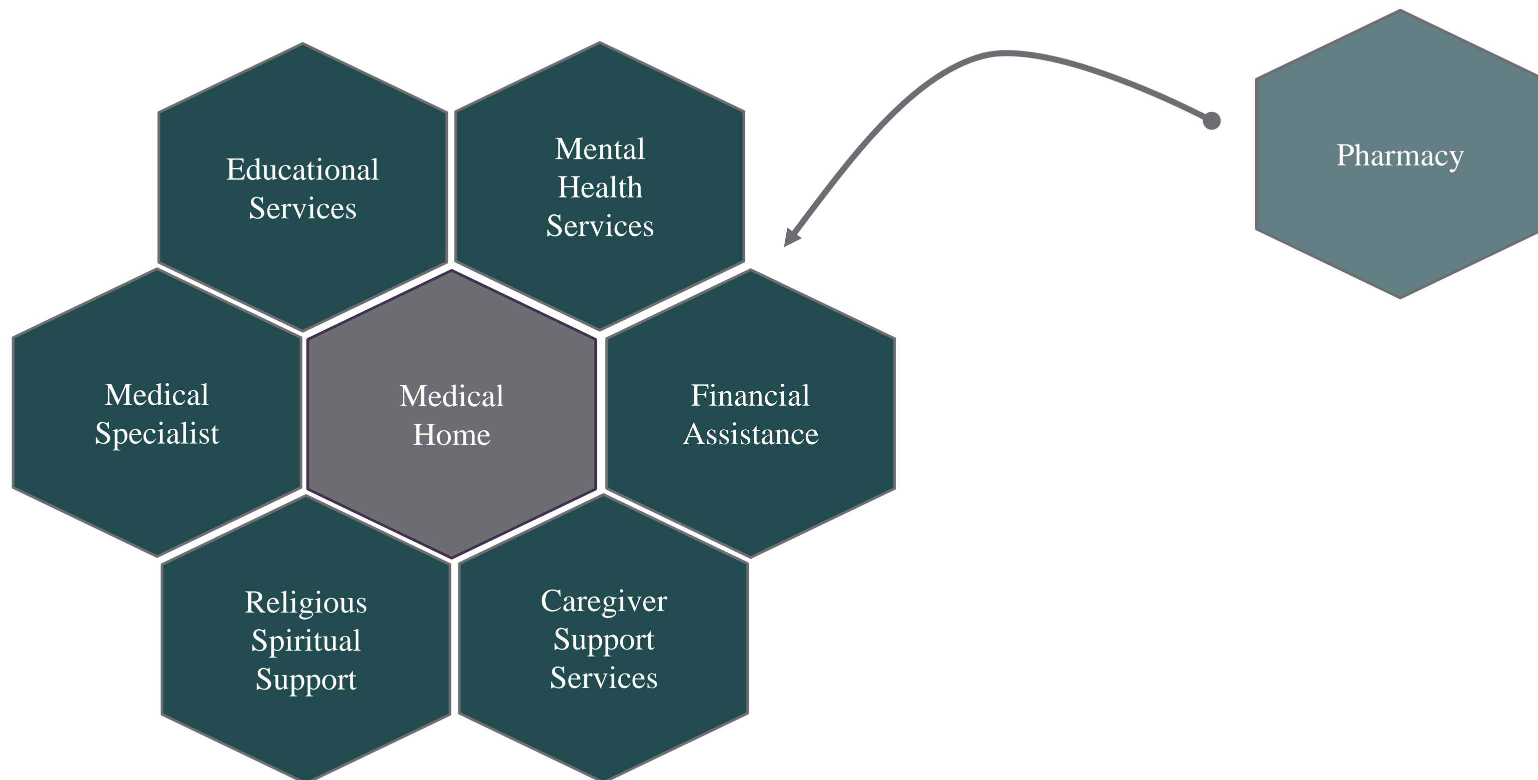
The patient-centered medical home is a model for care provided by physician practices that seeks to strengthen the physician-patient relationship by replacing episodic care based on illnesses and patient complaints with coordinated care and a long-term healing relationship



# The Medical Home Model

## Expanding the scope of traditional the medical home concept

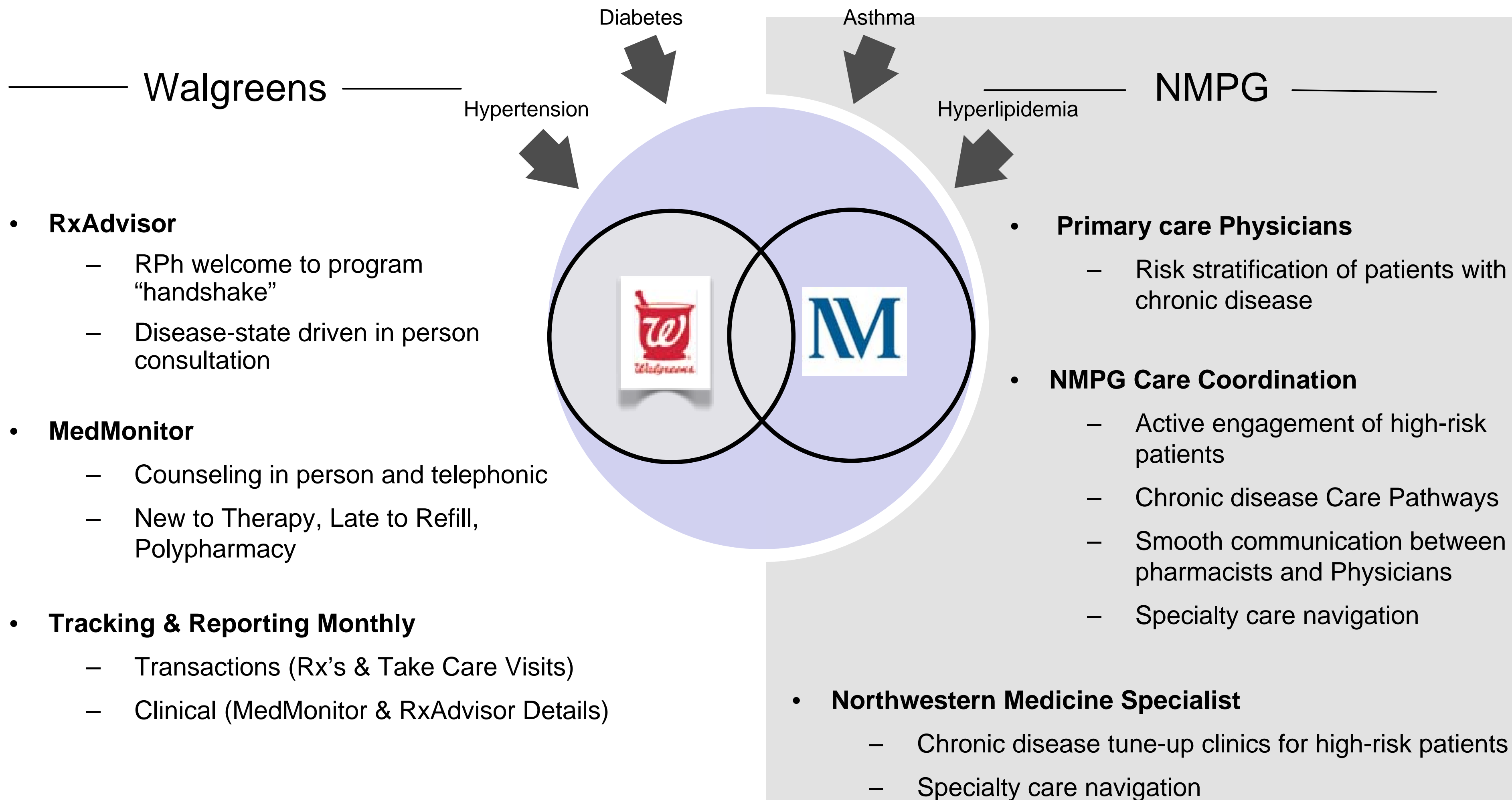
Working with Walgreens, NMPG is expanding the concept of a patient centered medical home by delivering a strongly coordinated care experience between the primary care provider and the pharmacy.



# Walgreens & NMPG Collaborative

## *Partnering with Walgreens for better outcomes*

Focusing on four chronic diseases, NMPG and Walgreens are aligning resources and sharing information in a smarter and more meaningful way to deliver individualized chronic disease management




**Walgreens**

- **RxAdvisor**
  - RPh welcome to program "handshake"
  - Disease-state driven in person consultation
- **MedMonitor**
  - Counseling in person and telephonic
  - New to Therapy, Late to Refill, Polypharmacy
- **Tracking & Reporting Monthly**
  - Transactions (Rx's & Take Care Visits)
  - Clinical (MedMonitor & RxAdvisor Details)

**NMPG**

- **Primary care Physicians**
  - Risk stratification of patients with chronic disease
- **NMPG Care Coordination**
  - Active engagement of high-risk patients
  - Chronic disease Care Pathways
  - Smooth communication between pharmacists and Physicians
  - Specialty care navigation
- **Northwestern Medicine Specialist**
  - Chronic disease tune-up clinics for high-risk patients
  - Specialty care navigation

# Keeping Up with Chronic Disease Patients

*Chronic disease pathway*

The Care Coordination Pilot trigger an additional periodic reviews of patients' chronic disease management and appropriate follow-up.

## PCO Message Template

**PATHWAY - Chronic Disease, TuneUp**
**Send to NMPGPOOL, IMREFERRALS**

**BACKGROUND**
This patient has been identified as having the chronic disease(s) listed below. Our records indicate you are the patient's PCP (If you are NOT their PCP – just let us know by Replying Back and stop here).

**DIRECTIONS FOR PHYSICIANS**
1) Identify this patient as low-risk or high-risk for each disease below.
2) If you want to see this patient for follow-up (regardless of whether you think they are low or high risk), please complete the "Scheduling Request" section at the bottom of this form.
3) Send this completed form to "NMPGPOOL, IMREFERRALS".

**APPOINTMENT STATUS**
* Patient's LAST appointment:
* Patient's NEXT appointment:

**DIABETES**
Part 1: TRIAGE PATIENT (Choose one)
[ ] Low Risk
[ ] High Risk - criteria might include:
--- HbA1C > 8% on most recent reading
--- ER visit or Hospital admit in past 2 years related to diabetes

IF HIGH RISK… Part 2: NEXT STEPS (may choose more than one)
[ ] Refer patient to the Diabetes Tune-Up Clinic. (NOTE to Physician: Make sure you have called the patient and he/she agreed to visit the tune-up clinic. See below for Sample Script to help explain to patient)
[ ] Patient referred to Tune-Up Clinic, but REFUSES: document in chart.
[ ] I prefer to just see the patient myself – see below for scheduling request.
Other:

**SCHEDULING REQUEST with PCP**
[ ] Set up patient for Follow-up appointment with me [ ] ASAP [ ] Other:
[ ] Set up patient for Annual Physical Appointment with me [ ] ASAP [ ]

*******************************************
**** SAMPLE SCRIPT for Talking with Patient ****
I'm calling because I'm really worried about your [Asthma, Diabetes, Hypertension, High Cholesterol] – a recent review of your chart found you were in a **HIGH RISK** category compared to other patients. Fortunately, we have created a special program for our High Risk patients – and I think it will be a great fit for you.

We created this program as part of a team effort with specialists at Northwestern Medicine. They will call you to set up an appointment and then they can review your case in depth. They will see you for a few visits to "tune you up" and then send you back to me for ongoing management. There is no special charge for this, it is covered like any other physician visits by your insurance company.

**Do you agree this sounds like a good idea for you?**

Pathway_ChronicDx_TuneUp_Mar2011_wo_markup.doc3/24/11 11:23 AM Page 1 of 2

This protocol is for pilot participants with: (1) Diabetes, (2) Hypertension (3) Hyperlipidemia, and/or (4) Asthma

## Chronic Disease pathway

**1.NMPG Care Coordination maintains a patient registry on all study participants**

**2.NMPG Care Coordination triggers periodic review of patients medical record to confirm patient's condition is managed**

**2.Patients are stratified into risk categories by the primary care physician based on pre-determined criteria and subjective understanding of the individual conditions**

**3.Patients at high-risk are scheduled for a specialist *tune-up* visit or asked to visit their primary care provider.**

Community Pharmacy

# Medication Therapy Management

- Pharmacists perform Medication Therapy Management, including Comprehensive Retrospective Drug Utilization Review.
- Phone and face-to-face pharmacist consultations.
- Patient information is tracked and sent back to the physician.
- MedMonitor aims to:
  - improve clinical outcomes and control healthcare costs by preventing adverse events and non-adherence;
  - maximize appropriate utilization of prescription medication;
  - influenced physicians’ prescribing practices to reflect national guideline standards; and
  - Decrease progression of costly disease states.

# RxAdvisor-based Pharmacy Intervention

## RxAdvisor Vignette

The NMHC and Walgreens Care Coordination Pilot identifies patients having difficulty with their medication therapy and empowers the primary care provider to intervene.

Mr. Jeffrey Butler, is a 64 year-old patient of NMPG who suffers from chronic hypertension and hyperlipidemia. During a recent visit to Walgreens was approached by a the pharmacist to discuss his current medication therapy. During the conversation, the Walgreens Pharmacist discovered:

1. Mr. Butler did **not** understand the goals of taking his medications.
2. Mr. Butler was **not** satisfied with how the medications were working for him.
3. Mr. Butler was **not** having any problems or side-effects from the medication. (probably because he wasn't taking it)
4. Mr. Butler did **not** know how often is his blood pressure top number above 150 or the bottom number less than 90.

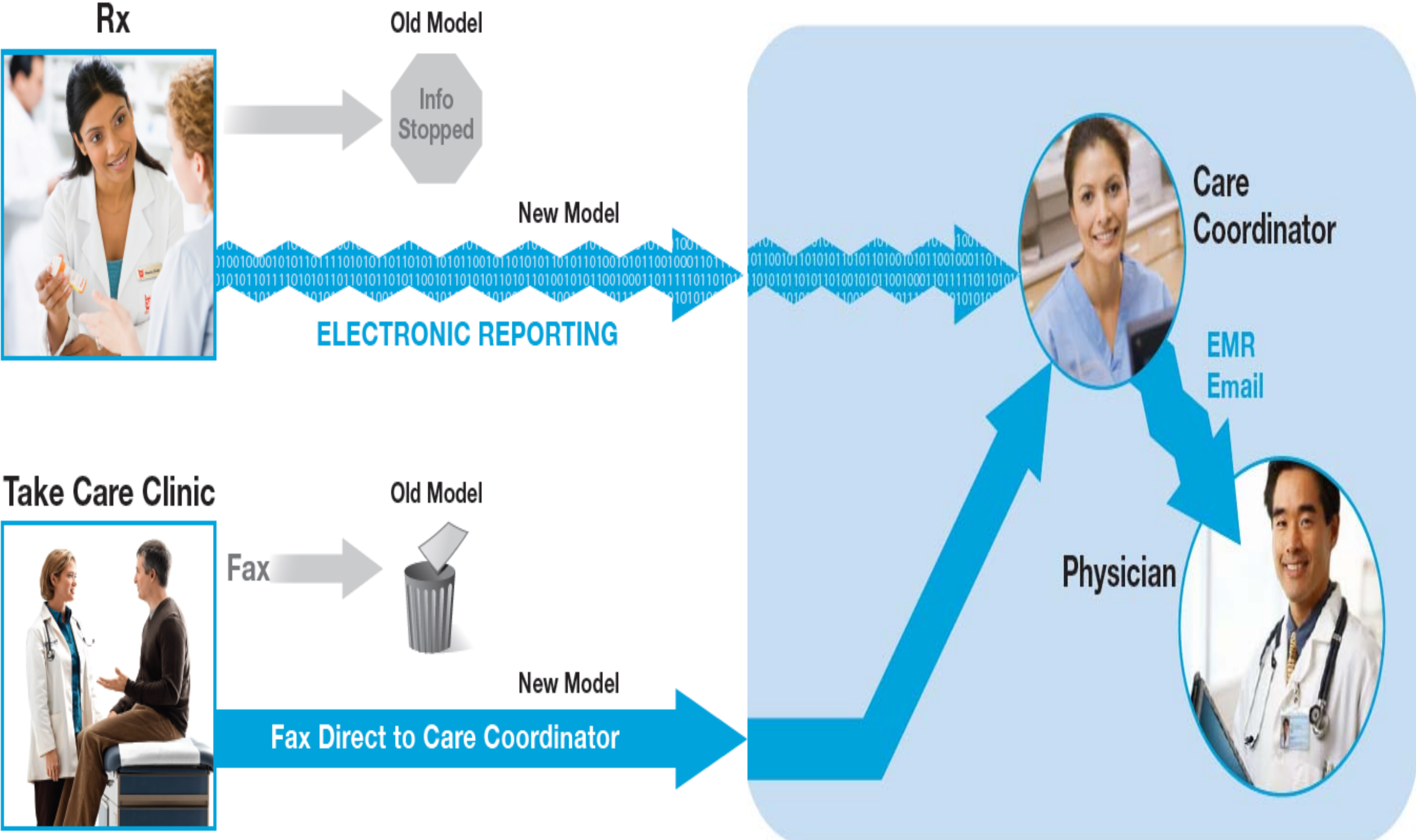
As part of the NMPG care coordination pilot, the above information was sent via electronic message to Mr. Butler's primary care provider, who could follow-up with Mr. Butler to discuss the importance of complying with his medication.

*name has been changed to protect the identify of the patient

# Electronic Transfer of Pharmacy Data

## The right information at the right time

Providing pharmacy data via the electronic medical record allows physicians to easily act on the information.



# Patient Experience

## A seamless healthcare experience

Aligning the combined resources of Walgreens and Northwestern Memorial leads to a better health care experience for patients.

- Patients' medical records are periodically reviewed by their physicians to determine compliance with care plans.
- Care Coordinators arrange specialty consults for patients with high-risk chronic disease.
- When filling medications at Walgreens, pharmacists approach the patient for a brief discussion on their disease and medication therapy.
- Walgreens pharmacists empower physicians with medication compliance data via messaging within the electronic medical record system.
- Patients receive primary care from providers who are more informed due to the seamless sharing of meaningful information.

# Preliminary Data

# Preliminary Results

## Patient Interventions

1715 NMHC & WAG employees and adult dependents have were included in the pilot, with approximately 436 patients with at least one diagnosis of Diabetes, Hypertension, Hyperlipidemia, or Asthma

| Employer | DM | | HTN | | Hyperlipidemia | | Asthma | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | n | % | n | % | n | % | n | % | n |
| NMH | 70 | 4.45 | 207 | 13.15 | 171 | 10.86 | 59 | 3.75 | 1574 |
| WAG | 3 | 2.13 | 32 | 22.70 | 21 | 14.89 | 0 | 0.00 | 141 |
| Total | 73 | 4.26 | 239 | 13.94 | 192 | 11.20 | 59 | 3.44 | 1715 |

### Key Walgreens Statistics

*NMHC & Walgreens Care Coordination Pilot*

| **Intervention** | **Total Interactions*** |
|---|---|
| RPh "Welcome to the Program" Handshakes | 995 |
| RPh Disease-State Driven Consultations | 222 |
| RPH Disease-State Drive Follow ups | 189 |
| MTM Consultations | 545 |
| ***Total encounter information shared by Pharmacist to Physician Group*** | **1951** |

*As of January 29, 2012

### Key NMPG Statistics

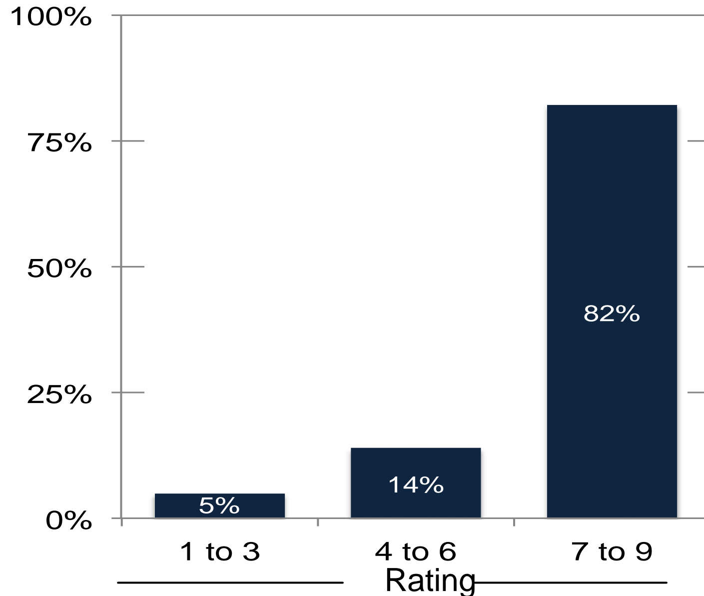
*NMHC & Walgreens Care Coordination Pilot*

| **Measure** | |
|---|---|
| MD response rate on risk stratification | 80% |
| Total pathways activated | 352 |
| Patients with low-risk Chronic Disease | 282 |
| Patients w/ high-risk chronic disease | 70 |
| Physician request immediate follow-up | 93 |
| Patient referred to *tune-up* clinic | 13 |

# Patients are Satisfied with the Pilot

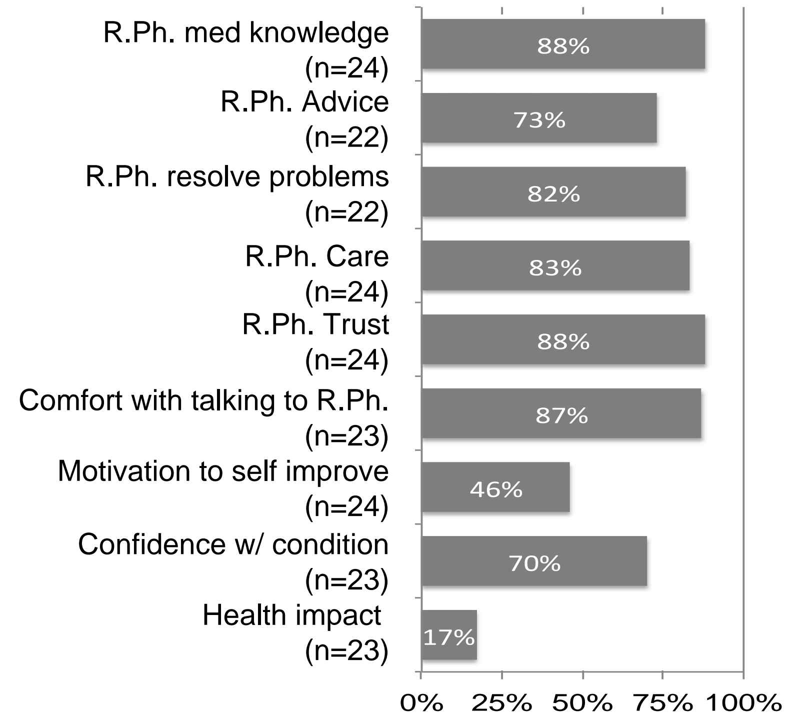
## Patient survey results

**Overall satisfaction with Walgreens and NMPG pilot program on nine-point scale:**




**Select survey questions: proportion of satisfied patients**

*(7, 8 & 9 ratings on 9 point scale)*

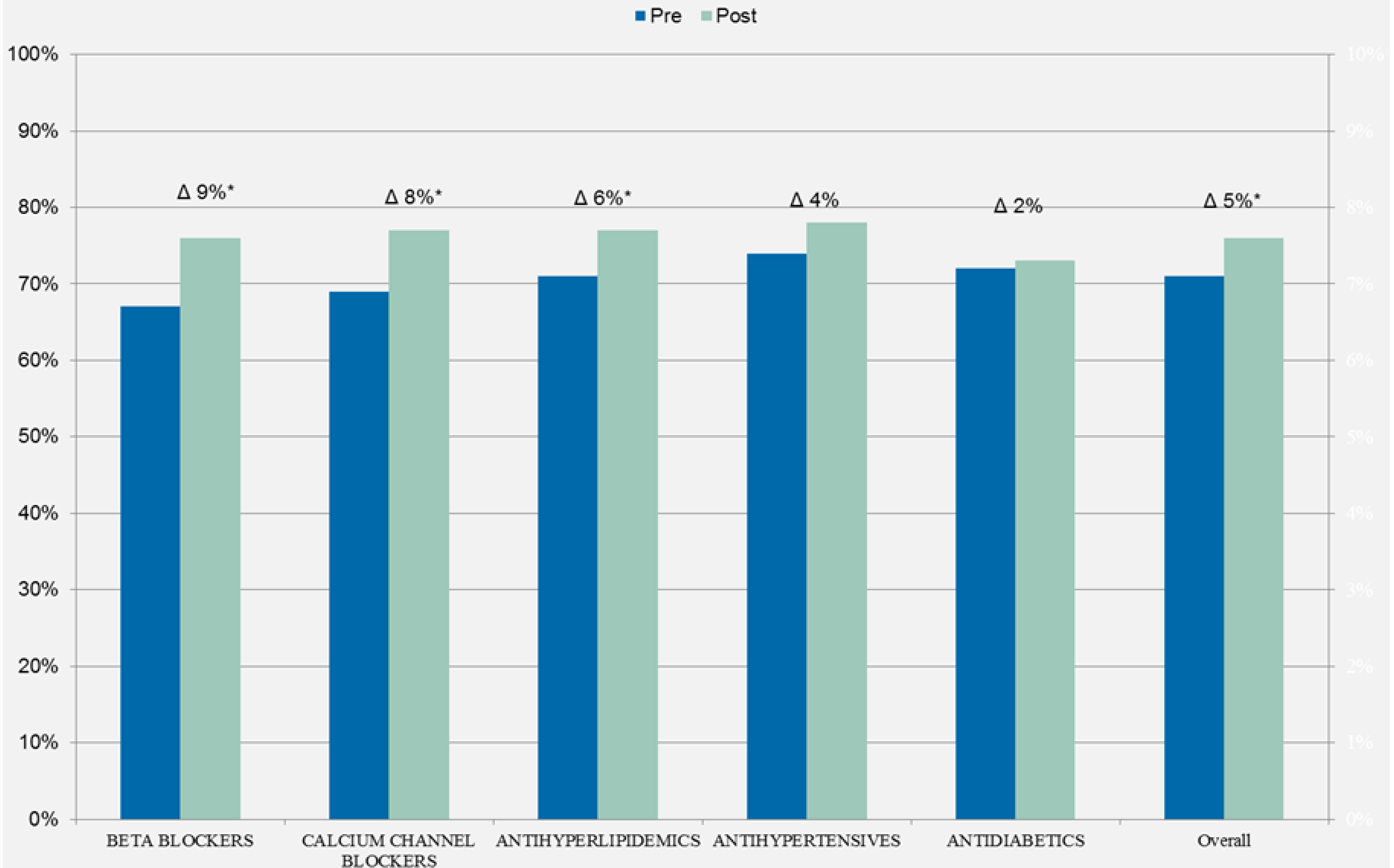



On scale where 1 = **"Not at all satisfied"**, etc. and 9 = **"Extremely satisfied"**, etc.

**Survey participant comments about the pilot program:**

- *"[The pilot program is] more coordinated and it's a really good idea. I think the doctor and pharmacy working more closely together is a good thing…, making sure the patient is being pushed towards better health…"*

- ***"Now I don't just feel like a case log, like a number. It's more individual… [T]hey really know who I am…"***


9-Month Change in Weighted Average MPR
Pre
Post
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Δ 9%*
Δ 8%*
Δ 6%*
Δ 4%
Δ 2%
Δ 5%*
BETA BLOCKERS
CALCIUM CHANNEL BLOCKERS
ANTIHYPERLIPIDEMICS
ANTIHYPERTENSIVES
ANTIDIABETICS
Overall
*Note*. Pre-period defined as 1/1/2010 - 9/30/2010; post-period defined as 1/1/2011 - 9/30/2011. Asterisk indicates change was significant ($p$ < 0.0001).

# *Lessons Learned*

- **Preparation**
  - Involving your outcomes and analytics team in the beginning of a pilot design will eliminate re-work and improve quality & validity.
  - Be sure the resources are fully in place with all coordinated care partners before rolling out pilot.

- **Educating Physicians & Pharmacists**
  - If your pilot changes front-line staff workflow, be sure to fully educate not only on the workflow changes,
  - …but also the value their work will be providing & how it is coordinating care & to whom.

# *Summary and Next Steps*

- Offering a more coordinated health care experience is part of both NMPG & WAG's strategic goals as a primary care provider and company respectively.

- Preliminary results of the care coordination pilot suggest participating patients view the collaboration between NMHC and Walgreens favorably and improved adherence has been noted.

- Since launching the care coordination pilot, NMPG and Walgreens have received IRB approval to study the impact of the care coordination pilot on patients' health outcomes.

# Q&A

Northwestern Memorial Physicians Group

Walgreens