

# PHARMACY SERVICES AT CHA

Meeting with CCI October 11, 2018

Presented by:

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Director, Pharmacotherapy Services

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Senior Clinical Pharmacist Specialist



# Special Thanks to Our Leadership Team

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- **Paul Allen, M.D., M.P.H.** Chief Quality Officer
- **Steve Cano, M.S, R.Ph., FASHP** Chief Pharmacy Officer
- **Anita Ballou, M.M., R.Ph.** Associate Chief Pharmacy Officer – Inpatient Services
- **Maria Kossilos, R.Ph.** Associate Chief Pharmacy Officer – Ambulatory Services
- **Mary Regan, Pharm.D., R.Ph.** Director – Clinical and Academic Pharmacy Services
- **Helen Gibbons, M.P.H., Pharm.D., R.Ph.** Manager - Medication Safety Systems
- **Allan MacEachern, M.S., C.Ph.T.** Manager - Pharmacy Systems and Operations

# Our Mission and Vision

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## Mission Statement

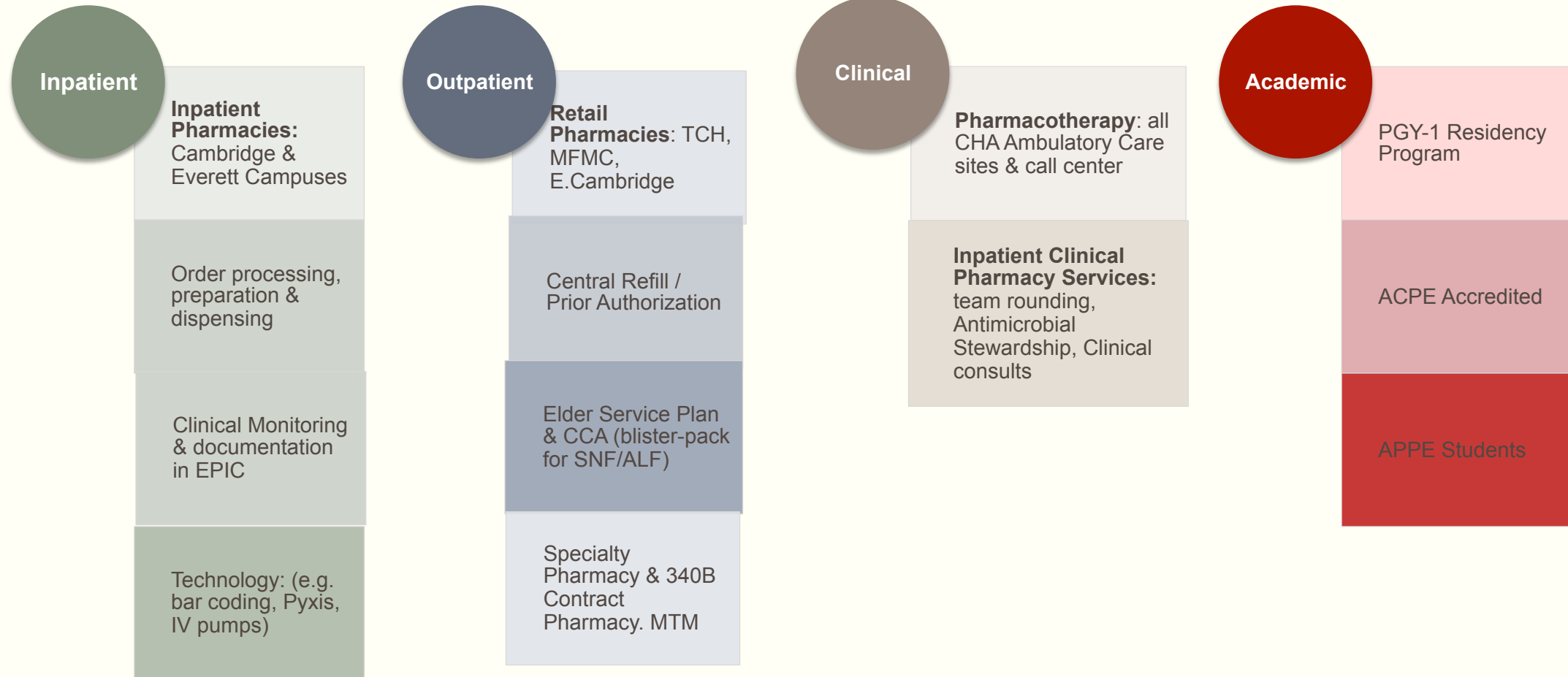
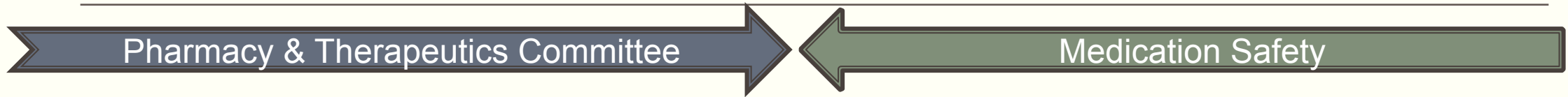
To improve patient outcomes by ensuring access to pharmaceutical care and deploying safe, responsible, and patient-centered / financially-responsible medication management strategies. Our mission will be carried out in a collaborative fashion by balancing care, service, technology, teaching, training, education, and research.

## Vision Statement

The Cambridge Health Alliance (CHA) Department of Pharmacy is committed to:

1. safely providing the highest quality, patient-centered pharmaceutical care and service to all CHA patients;
2. embracing the CHA CIRCLE of Values and being viewed by current and prospective staff as the best place to work, train and practice pharmacy;
3. being acknowledged as an essential member of the patient care team;
4. expanding and adapting services to meet patient needs in a manner consistent with innovations in medicine and technology; and
5. participating in medication related research and policy development that matches our public health / safety net mission.

# Pharmacy Enterprise Service Lines





# TEAMING AMBULATORY CARE AND PHARMACY SERVICES

A focus on collaboration with Outpatient Pharmacy Services and Pharmacotherapy Services

# Outpatient Pharmacy Services Summary

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## Retail Pharmacy

- Over 350,000 Rx dispensed in our retail pharmacies
- Employee prescription kiosk program
- Medication Therapy Management Programs

## Contract Pharmacy

- 340B drug discount program to eligible patients
  - Rx filled at CHA
  - Rx filled at outside retail pharmacies we are contracted with

## Central Refill

- Process refill requests from patients, pharmacies to prescriber
- Prior authorizations, pharmacy benefit analysis (co-pays/formulary)

## Specialty Pharmacy

- Medications with high costs for a course of treatment or a year of therapy (CMS > \$600 / month)
- Novel therapies requiring special handling, monitoring or administration; or are used to treat rare conditions
- Maximizes medical benefit by cost management by pharmacy benefits
- 1<sup>st</sup> integrated health system in MA to be URAC accredited – negotiating exclusive contracts for distribution

## Elder Service Plan

- Capitated program for nursing home eligible patient services
- Provide lower cost medication in blister packaging to participants
- Provide Medication Therapy Management to optimize patient care



# Outpatient Pharmacy Services

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## Benefits of using CHA Pharmacies

- Financial sustainability
  - 340B Discount program
  - Onsite specialty pharmacy
  - Employee prescription program
- Access to CHA medical record and electronic communication through EPIC
- Centralized refill services, including processing prior authorizations & pharmacy benefit analysis
- Optimize patient medication regimens for cost-effectiveness and safety (MTM/ACO)
- Meds to Beds program before inpatient discharge

## Three retail pharmacy locations

1. Cambridge Hospital Campus 2<sup>nd</sup> floor  
Monday – Friday: 8:30am – 7pm  
Saturday – Sunday: 9am – 3pm
2. E. Cambridge Health Center -Gore St  
Mon/Wed/Fri 8am-6pm  
Tue/Thurs 8am -8 pm
3. Malden Care center –Canal St.  
Monday – Thursday 8am – 8pm  
Friday 10am-5pm  
Saturday 10am – 1pm



# What is Pharmacotherapy Services?

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As part of the Ambulatory Division of Clinical Pharmacy, our pharmacist-managed Pharmacotherapy Services Program helps patients achieve the best outcomes with their drug therapy regimen. Our patient centered approach and our skilled and compassionate pharmacists work with patients and their healthcare team to ensure that their drug therapy plan is optimal for them. Through individualized and thorough education, the Pharmacotherapy Services pharmacists provide a complete review of medications and drug interactions, as well as diet and lifestyle counseling.

Our Pharmacotherapy Services Providers help patients:

- better understand their disease and drug therapy plan
- monitor effectiveness of their drug therapy
- prevent adverse drug reactions
- learn the best way to take and administer their medications
- identify new, cost-effective drug therapy plans
- improve their health and quality of life by being a participant in their own care





# Areas of Pharmacotherapy Services

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Available at all sites:

- Anticoagulation Management
- Diabetes Management
- Hypertension Management
- Lipid Management
- COPD Management (including rescue packs)
- Asthma Education
- Smoking Cessation
- Complex Medication Reconciliation and consultation

Limited availability\*

- Infectious Disease\*
- Chronic Pain Management\*
- Immunizations / Travel Health\*
- Falls Prevention\*
- Psychiatry consult\*



## Referral to Pharmacotherapy

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A CHA physician may refer a patient to Pharmacotherapy Services for various reasons through EPIC, including:

- **Drug therapy monitoring** – Pharmacists work with the patient to ensure safe and effective use of their medicines.
- **Individualized drug therapy counseling** – Pharmacists teach patients about all their medicines and help them develop a strategy for remembering when and how to take their medicines properly.
- **Chronic Disease state management** – Pharmacists collaborate with patients' care team to reduce or prevent blood clots or get the patient's high blood pressure, diabetes, high cholesterol or other conditions under control.

# A Pharmacist on the Primary Care Team

July 11, 2018

Victoria Liu is the primary pharmacist at our Revere Health Center.

- Won Collaborating Colleague Award at the Annual Medical Staff Dinner May 2018
- Featured in eBEAT “can you say Good-Bye to Diabetes” July 11, 2018
- Health Fair in Malden Mary 2018
- Collaboration with Business Analytics to improve quality and utility of our Pharmacotherapy reports
- Recently featured in a video production about integration of pharmacists on the care team

## OPENING MESSAGE

### Can you say Good-Bye to Diabetes?

**Sandra Valentini** has the perfect personality for her job in Patient Transportation at CHA Everett Hospital. “I spend a lot of time listening and talking with patients,” Sandra explained. She can relate to their experiences because she’s like many of them. She’s trying to manage her own illness. Sandra has diabetes.

There are 30 million people with diabetes in the United States and about 84 million with pre-diabetes. This has tripled over the last 20 years and Hispanic/Latino Americans are at higher risk.



“It’s concerning that one in four people with diabetes don’t know they have it,” said **Lorky Libaridian**, MD, a primary care physician at the CHA Revere Care Center. “The most common type of diabetes is Type II, with risk factors including being overweight or obese, having a family history, being 45 years old or more, being physically active less than three times a week and having had gestational diabetes. However, people can have none of these risk factors and still get the disease.”

While diabetes is the seventh leading cause of death in the United States, it’s the number one cause of kidney failure, lower-limb amputations and adult-onset blindness. In Sandra’s case, she had warning signs. “I was really tired and thirsty all the time. The key is catching it early.”

Seeing a doctor right away for a simple blood test can provide answers quickly. “Many people equate diabetes with the need to take insulin. Today there are many options for treatment like oral medication. The most encouraging aspect of this disease is that some people are able to reverse it or postpone it by changing their lifestyles,” said Dr. Libaridian. “I do have patients who are managing their disease and no longer need medication because they have lowered their blood sugars through thoughtful eating and exercise.”

“When I first started seeing Dr. Libaridian, I wasn’t in a good place. I was discouraged and I believed the things some of my relatives were telling me – that I was fat and ugly. Now it feels like ‘girls night out’ when I come for my three-month check-up. I lost 24 pounds with my new gym membership and lots of walks with my dog. I brought my A1c down from 10 to 7.7 and I’m going to make it to my goal of 6.5.”

“The Hemoglobin A1c test measures glycated hemoglobin, and tells us what someone’s average blood sugar has been over the past 2-3 months,” said Dr. Libaridian. “That is important because, while a finger stick blood test tells us what the blood sugar is at that moment, it doesn’t tell us if it’s been really high or low other times. And we know that blood sugar can vary a lot from hour to hour and day to day.” Patients with diabetes and pre-diabetes work to keep their A1c levels controlled. In most cases, this means that a patient’s A1c is less than 8, and in many cases between 6 and 7.

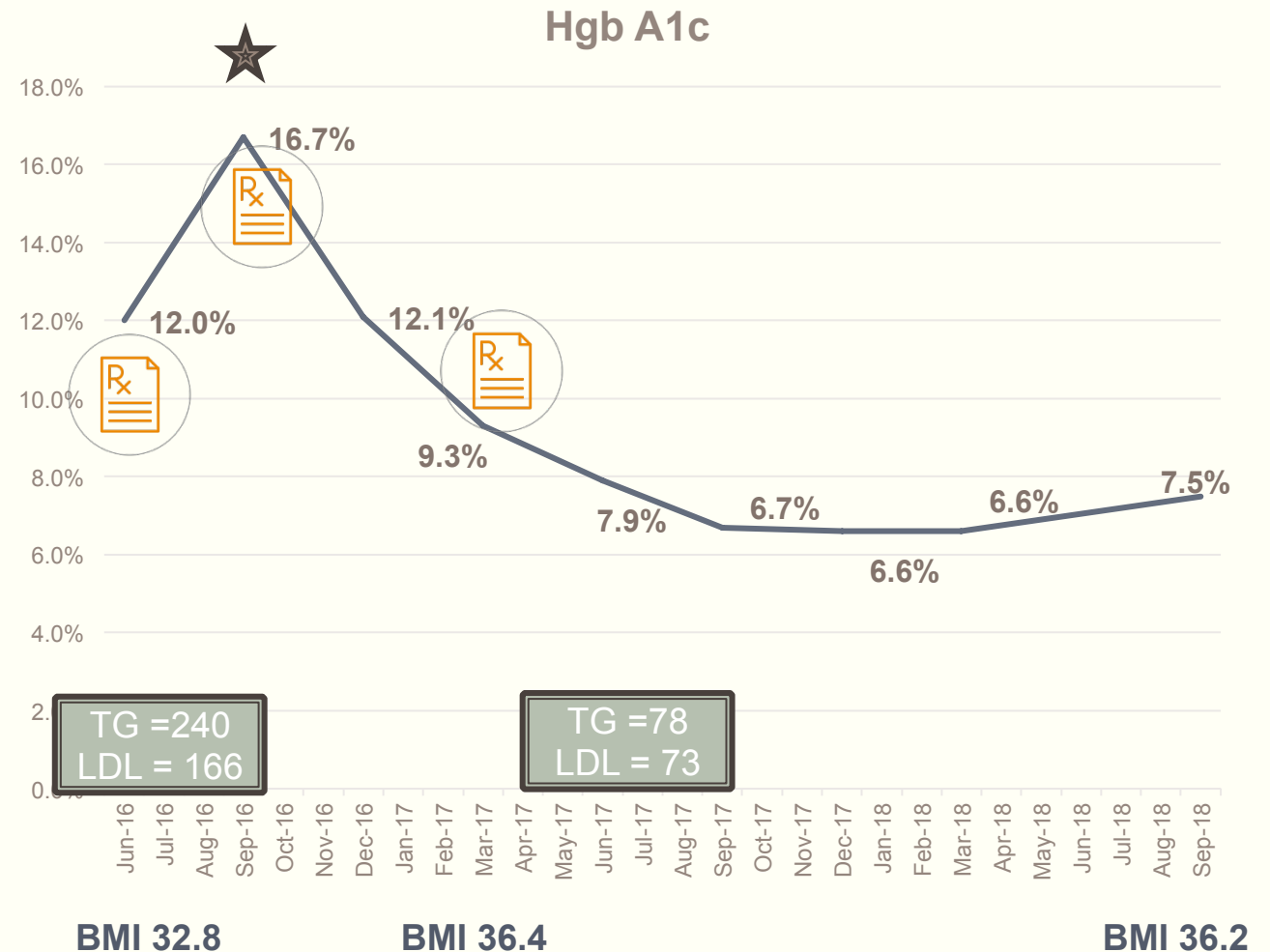
“We offer a same day A1c check, before each patient sees their provider,” explained Medical Assistant **Josue Umanzor**. “The provider is able to discuss the results with each patient as well provide counseling, explain the meaning of the results and how to have better control of their diabetes levels. The team connects patients to resources that help them manage their diabetes, including access to a certified nutritionist who can help patients plan healthy meals.”



<https://www.dropbox.com/sh/99h6jt0niajyu2a/AAQMVaFfa2lCkvbcTVMsiRfqa?dl=0>

# Patient Success Stories – Building Relationships

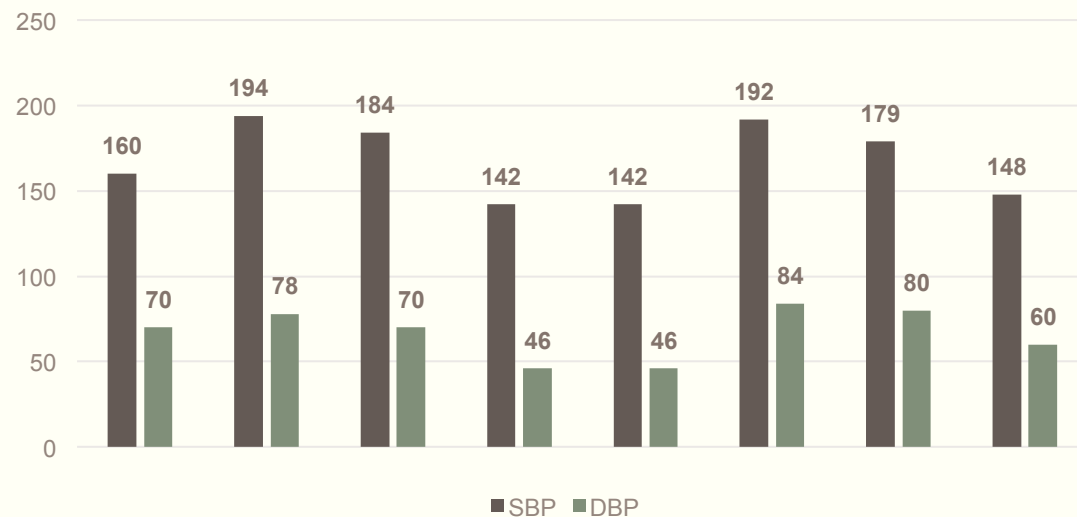
- DN is a 46 yo Haitian female with type 2 DM presenting with a HgA1c =12% & elevated lipids
  - Recently immigrated to the US and new patient to CHA
  - Blood Pressure controlled
- Barriers to treatment
  - Language / Cultural
  - Fear of Injections
  - Adverse effects of medications
  - Adherence challenges
  - Appointments missed or refused
  - Outreach challenging



# Patient Success Stories – Addressing Adherence

- MA is a 68 yo female with hypertension & Alzheimer's found to be uncontrolled 160/70 at her PCP visit 10/6/2017
  - Struggles to remember where her meds are stored due to safety of young children in home & often misses doses
  - Caregiver engaged and follow up with pharmacy

Blood Pressure  
10/2017-2/2018



Transferred all prescriptions to CHA pharmacy for blister packing & home delivery



Home blood pressure monitoring with follow up over phone

# Tips for Successful Pharmacotherapy Care

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- Warm hand-offs whenever possible
  - “I’d love to introduce you to our clinic pharmacist, Emily at the end of our visit, would that be ok?”
- Relationship building patient/provider and “managing up”
  - “Whenever my patients work with our pharmacist, they feel like they better understand how their medications improve their health”
- Patient-centered care decisions
  - “Learning to inject medications can be overwhelming. How do you feel about just meeting with the pharmacist to learn about all the medication options you have?”
- Understanding barriers to care
  - Insurance formulary coverage, co-pays
  - Co-morbid conditions
  - Personal beliefs and lifestyle



# PHARMACOTHERAPY SERVICES DASHBOARD

Productivity and Quality Metrics

# Pharmacotherapy Dashboard: Productivity

<b>FY18*: (July 2017- June 2018)</b>	<b>New Referrals</b>	<b>Clinic Visit Volume * (billable facility fee)</b>	<b>Hours of Direct Patient Care</b>	<b>^Total Paid FTEs</b>	<b>Total AMS Telephone Management Encounters (non-billable)</b>	<b>Home Visit INRs (Non- billable)</b>	<b>Total Call Center Volume^</b>
Q1	460	5822 (4725)	2578	moving avg. based on pay period	1301	315	1777
Q2	471	5896 (4456)	2631		1281	325	1841
Q3	440	5489 (4275)	2505		1552	287	1541
Q4	526	5792 (4623)	2690		1791	292	1619
<b>FY18 Total</b>	<b>1897</b>	<b>19755 (18,079)</b>	<b>10404</b>	<b>17.32</b>	<b>5925</b>	<b>1219</b>	<b>6778</b>

\*Volume includes non-billable office visits  
(Kaufman-Hall by billing cycle & billable)

\*June 2018: 320 hours of patient access (91 sessions) across CHA

- All 12 primary care centers
- 2 Medical Specialties: CMS, EHS/pulm rehab

^AMS Call Center: Monday – Friday 9am-5pm, after hours on call service

# Pharmacotherapy Dashboard: Outcomes Measure Diabetes and Anticoagulation

FY18	Diabetes			Anticoagulation		
PhTx	# of Patients	A1c Control (Age 18-75 2/A1c <8%) Target 66%	Age 18-76 BP <140/90 Target 79%	# of AMS Visits	INRs in Range	INRs within +/- 0.2
Q1 (July- Sept)	1071	37.4% (16.6%)	81.0% (74.2%)	2298	62.0%	77.5%
Q2 (Oct-Dec)	1068	47.5% (15.4%)	76.7% (69.0%)	2201	60.9%	76.3%
Q3 (Jan- March)	1032	46.6% (14.7%)	76.5% (69.8%)	1975	60.5%	75.7%
Q4 (Apr-Jun)	1068	40.9% (14.7%)	78.2% (71.9%)	1976	58.7%	73.0%

- Post readings taken from last pharm visit for HTN report (BP)
- Post readings taken from any visit for DM report (BP)

HTN service really underutilized so CHA is collaborating with primary care to improve this by getting S. O. and rolling out support

DM Data shown as % controlled (% controlled before pharm)

# Pharmacotherapy Dashboard: Outcomes Measures

## Hypertension

**FY18\*:**  
**(July 2017-June 2018)**

Quarter	Avg BP Reading			Age 18-59 BP<140/90 Target: 79% % Controlled			Age 60-85 w/o DM BP<150/90 Target: 79% % Controlled			Age 60-85 w/ DM BP<140/90 Target: 79% % Controlled		
	Pre Pharm Visit OP BP	Most Recent Pharm BP	Most Recent OP BP	OP Visit Prior to 1 <sup>st</sup> Pharm Visit	Most recent Pharm Visit	Most Recent OP Visit	OP Visit Prior to 1 <sup>st</sup> Pharm Visit	Most Recent Pharm Visit	Most Recent OP Visit	OP Visit Prior to 1 <sup>st</sup> Pharm Visit	Most Recent Pharm Visit	Most Recent OP Visit
Q1 (n=93)	151/82	137/76	136/76	8.6%	54.3%	62.9%	27.3%	75.8%	72.7%	26.1%	65.2%	52.2%
Q2 (n=94)	150/82	136/74	133/74	19.2%	73.1%	76.9%	26.5%	79.4%	76.5%	31.3%	56.3%	62.5%
Q3 (n=90)	149/84	132/75	130/73	16.1%	67.7%	80.6%	36.1%	77.8%	86.1%	14.3%	71.4%	81.0%
Q4 (n=109)	153/84	134/74	134/75	14.3%	65.7%	69.6%	27.0%	78.4%	81.1%	21.9%	71.9%	68.8%

# Value of Pharmacotherapy Services at CHA

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- A Pharmacist on the Primary Care Team
- Patient Satisfaction Survey 2017
- Provider Satisfaction Survey 2017
- Patient Cases
  - Relationship building
  - Addressing adherence
- Tips for Successful Pharmacotherapy Services
- Accountable Care Organization: Medical Management Steering Committee
  - Clinical Sub-committees: Hypertension, Diabetes, COPD, substance use disorder

# Pharmacotherapy Patient Satisfaction Survey Results: February 2017

## Survey Method

- Discussed Engagement Survey Action plan with M. Lidman (HR)
- Team created simple 3 question survey for patients
- Translated into Spanish, Haitian Creole and Portuguese
- Asked patients to complete paper survey after a Pharmacotherapy Visit
- Collected in a designated envelop outside of exam room
- No patient identifiers
- Goal: to collect 10 patient surveys from each location we provide care
- Did not include AMS Telephone Managed patients

## Pharmacotherapy Sites

- Broadway Health Center: 9 surveys
- Cambridge Anticoagulation Management (Cahill): 11 surveys
- Cambridge Family Health: 17 surveys
- Cambridge Family Health North: 7 surveys
- Cambridge Primary Care: 0 surveys
- Everett Health Center: 10 surveys
- Malden Family Health Center: 15 surveys
- Revere Health Center: 10 surveys
- Somerville Hospital Primary Care: 10 (AMS) & 10 (DMS) surveys
- Union Square Family Health: 9 surveys
- Windsor Health Center: 3 surveys

## Survey Questions

1. How was your Experience today?
  - Can you share comments on your experience?
2. Do you think today's visit was useful and helpful with your medications?
3. Do you have any comments that you'd like to share with us?
4. Would you like to share any ideas that could help us improve your next visit?

## Survey Responses

1. **100% Positive Responses:** "it was good", it was great", "it was fantastic"
  - Comments: majority of patients added a comment often mentioning their pharmacist by name and very positive experiences
2. **100% Positive Responses:** All answered "Yes"
  - Comments: many of patients added comments and added things they've learned
3. Many ideas and helpful comments for next visit improvement

## Lessons Learned & Action Plan

- **Patients seem to prefer same provider each visit**
- **Patients want appointment reminders**
  - We now have a dedicated pharmacy technician to support each clinic
  - Utilize my chart and appointment reminder calls
- **Patients would like more access**
  - Working on adding more sites and appointment times
- Patients would like free parking & the cafeteria back (SH)
- Suggest using a tablet for surveys in the future
- Feedback was very helpful to the team and encourages the staff to keep up the great work they do.

## Survey Comments

- "Pharmacist does a great job every time I see her. She listens to what I say and gives understanding feedback about my conditions and problems"
- "I learned more today"
- "All the people that help me during my process were very nice and helpful"
- "Pharmacist explains all risks, pros and cons and takes time to clear all"
- My Experience was excellent, very friendly, courteous, professional"
- "Pharmacology was great. I appreciate coming here"
- "All my needs were addressed and answered"
- "This is helping me a lot"
- "On time, pleasant pharmacist, helpful and good information"
- "As always, I had a great experience with the pharmacist. Asked several questions regarding my health, activities and recent changes in my lifestyle. This is always the case with everyone I meet here on all of my appointments. I'm really appreciative of their service"
- "Professional, friendly and took the time to listen to my comments. Asked me questions and waited for my reply."
- Appreciate consistency of providers (same RPh), like having students, relaxing environment
- "Pharmacist is always good at explaining everything very well. He makes sure he knows how I am doing and willing to help me with anything if needed. "
- "I think the most important thing is making you feel comfortable. Able to speak with health professional listening."
- "Yes I experience a good evaluation and reassuring the medications taken and a good follow-up with appointments"
- "My experience was very good. I learned to be more organized about my meds, doses and how to take them."



# Pharmacotherapy Provider Satisfaction Survey Results: January 2017

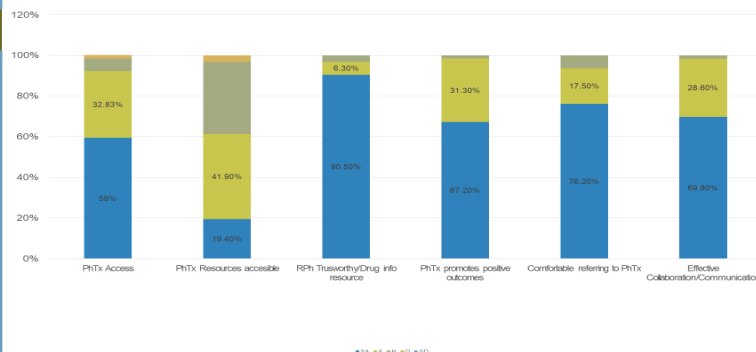
## Survey Method

- Survey sent to all CHA Ambulatory Care and Medical Specialty Email Distribution lists.
- Google Form survey with 7 Likert scale questions and 2 short answer feedback questions
- Opportunity to free text additional comments
- Conducted over 2 week period in January 2017
- 64 responses received

## Background

- Pharmacotherapy exists in some capacity at all Adult / Family Medicine Site
- Our goal is to provide high quality clinical pharmacy services that help support the healthcare team in achieving the best outcomes in our patients.
- Feedback from Providers and Patients is critical to meeting the needs of the recipients of our work
- The last provider survey was conducted in 2013

## Provider Survey Responses



## Provider Suggestions

- Motivational Interviewing around ambivalence behavior changes
- Best way to communicate with AMS providers
  - (AMS provider pool or call x8542)
- More access (several comments)
  - Hypertension
  - Hard to get appointments
- Make us aware of what is out there
- Medical Marijuana strains effectiveness for different conditions
- Drugs and Alcohol
- Anticoagulation at all sites

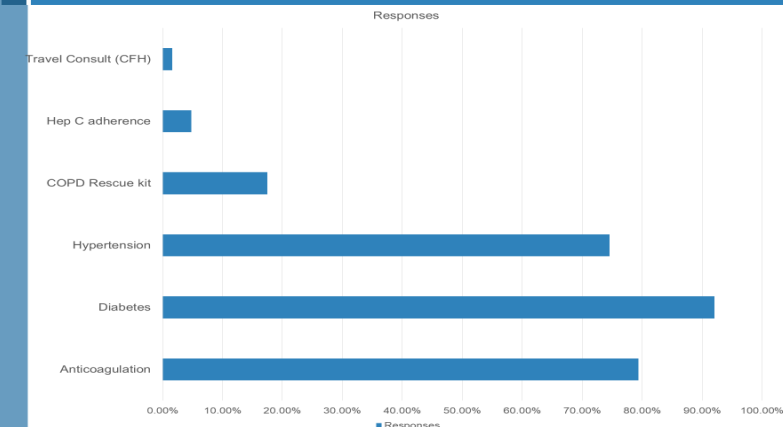
## Additional Feedback

- “Outstanding Service”
- “Love being able to collaborate with our pharmacist, super helpful”
- “I love our clinic pharmacist. They are super helpful and responsive, for a wide variety of medication related issues and questions”
- “Not aware protocols were on staffnet”
- “Wonderful Collaborative service to have here in clinic”
- “Thanks, you are all great!”
- “I struggle to reach AMS on weekends, problem getting on-call pharmacist”

## Most Helpful Services to Add

- Inhaler Teaching / Asthma Education
- Pain / Chronic Pain management
- Comprehensive Medication review / Medication Reconciliation
- Advice on Drug Interactions
- Triage calls for “problem prescriptions” currently handled by nursing
- Appointment Reminders & outreach for Pharmacotherapy visits
- Staff Education on clinical guidelines and engaged in clinical team
- Travel Consults beyond CFH site
- Co-location with providers rather than extended care team
- Diabetes supplies/insurance navigation
- Vaccinations
- Medical Marijuana Dispensary

## Results: PhTx Services Use



## Lessons Learned

- **Improve communication of services and resources**
  - Many requests for services that we actually provide
  - Services that are in a different area/scope
  - Action plan: attend site staff meetings, share results across CHA in different forums, improve access to information on Staffnet
  - Collaborate with On-Call Service to understand challenges in provider getting calls
- **Top Service Requests**
  - Respiratory Care Services- *drafted Asthma, expand COPD*
  - Access – *trying to expand*
  - Pain management –*plan to draft*
- **Share feedback with Outpatient Pharmacy**
  - Several comments are outside of our scope of practice (rx triage, MMJ, diabetes supplies)

# Accountable Care Organization / Medical Management

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- Pharmacotherapy is member of Steering Committee & several subcommittees
  - Established Disease Clinical Guide across continuum of care, protocol(s) and practices outlining involved disciplines
- Help support pay for performance measures in ambulatory setting
- Work with ACO to optimize overall cost of care (medication dispensing/optimization)

Other areas of our work across organization:

- CHF
- Diabetes
- Hypertension
  - standing order recently approved
- Substance Use Disorder
- Behavioral Health

# QUESTIONS AND ANSWERS

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Phone: 617-806-8513



# APPENDIX

Additional reference slides

# Pharmacist Training and Licensure

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## Education Requirements for licensure

- Bachelors Degree (BS pharm)
  - 5 year program - original Pharmacist degree
  - In 2000, ACPE announce conversion PharmD as the sole entry-level degree in pharmacy
- Doctor of Pharmacy (PharmD)
  - 6 year program: 2 years pre-professional+ 4 years professional
- Minimum of 1500 experiential learning hours
- North American Pharmacist Licensure Examination (NAPLEX)
- Multistate Pharmacy Jurisprudence Examination (MJPE)-law exam
- Continuing Education Requirements

## Post Graduate Training Opportunities

- Residency – general pharmacy practice year 1 after graduation
  - Option PGY-2 focused residencies
- Fellowships research in specialty areas

## Ongoing Training and Certifications:

- Board Certification
  - Pharmacotherapy, Ambulatory Care, Psychiatry, Geriatrics, Specialty Pharmacy, Infectious disease
- Certificate Programs
  - Many Opportunities: Immunizations, Education, Diabetes, Anticoagulation, Pharmacy Leadership

\*CHA has 70 pharmacists across the organization.

# Pharmacist Credentialing, Privileging & at CHA

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- Pharmacists at CHA began participating in the Credentialing and Privileging process in FY16
- Privileges granted to pharmacists in the Inpatient, Clinical (ambulatory and inpatient), and Retail pharmacy service lines
  - 2 year renewals are starting Fall 2018
  - Ongoing Professional Practice Evaluations process
  - Privileges issued specific to scope of pharmacist's collaborative practice role
- Supervising Physicians
  - Provide oversight of pharmacist collaborative practice and privileges
  - Provide ongoing clinical support
- Collaborative Drug Therapy Management (CDTM)
  - 247 CMR 16: MA Board of Registration in Pharmacy regulation that outlines the criteria for pharmacists to engage in CDTM with physicians
  - Outlines requirements for education and experience, prescriptive authority and on-site supervision
  - Referral for patient specific care to the pharmacist
  - Detailed practice protocols, outcomes measures, & procedures
- CHA has Attendings co-sign visits/orders to minimize issues for patients and billing

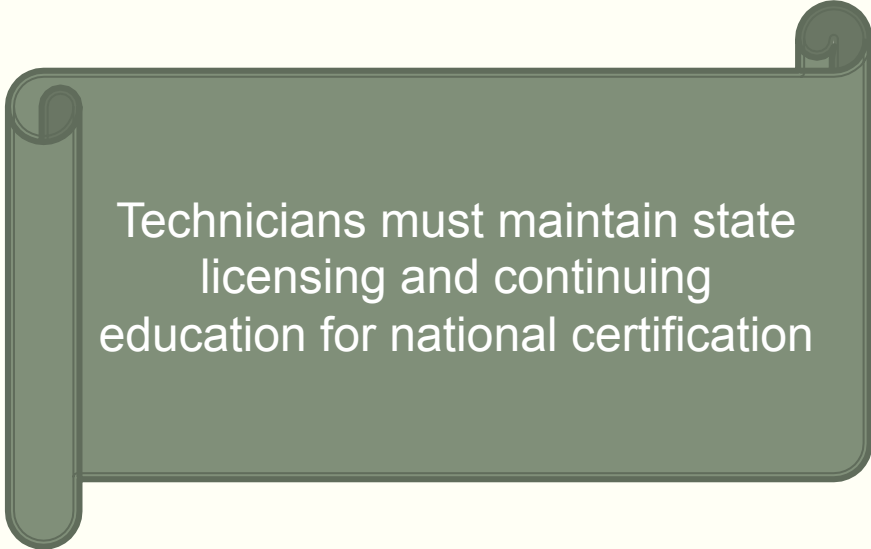


# Nationally Certified Pharmacy Technicians at CHA

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Our Pharmacy Technicians support CHA in many roles:

- Traditional dispensing and pharmacy support:
  - Inpatient medication preparation (IV/PO)
  - Outpatient dispensing
- Technician Specialist Roles:
  - Inventory management
  - IV training of new employees
  - Technology management
  - Central Refill / Specialty Pharmacy: Prior Authorizations, pharmacy benefit analysis (coverage/co-pays), refill processing, 340b eligibility, screening for MTM opportunities
  - Pharmacotherapy: provide INR testing through home visits, central telephone management (anticoagulation), patient outreach, quality improvement, support of population health
- CHA has 68 technicians



Technicians must maintain state licensing and continuing education for national certification