Integrating Technology into Healthcare

Northwest Community Health Center

Libby, MT

March 2019

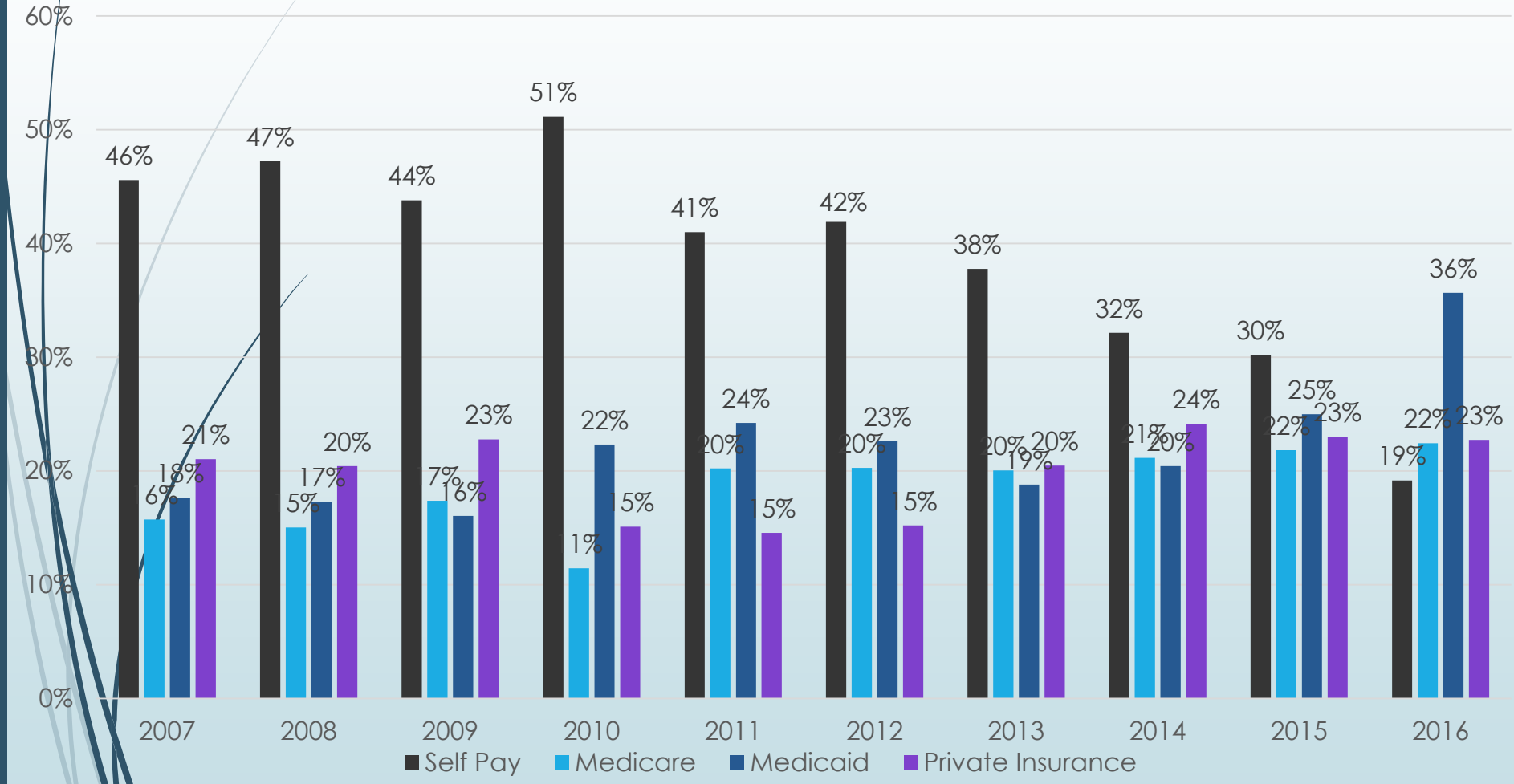
Lincoln County

- Remote
- Isolated populations
- Vast geography
- EPA Superfund Site
- 3 Primary Centers of Population
  - Libby
  - Troy
  - Eureka

Northwest Community Health Center

- 18 years of service
- Service 1 in 3
- Provide nearly 50% primary care services locally
- 7,114 unduplicated patients
  - 33 % Medicaid patients
  - 22% Medicare patients
  - 19% Uninsured patients
  - 72% Patients < 200% Federal Poverty Limit

NWCHC Patient Trends



NWCHC Libby

- Medical
- Dental
- Pharmacy
- Behavioral Health
- WIC
- Outreach and Enrollment
- Case Management

NORTHWEST CHC
Community Health Center

NWCHC Troy

- Medical
- Dental
- Behavioral Health
- WIC

NWCHC- School Based Clinic

- Medical

Virginia Reeves

- Connection to community resources
- Patient advocate
- Motivational interviewer
- Coach
- Problem solver
- Critical thinker

Liz Wolsfelt

- Motivational interviewer
- Coach
- Teacher
- Problem solver
- Critical thinker

Nicky Willey

- Mentor
- Motivational interviewer
- Teacher
- Data whiz
- Problem solver
- Critical thinker

NWCHC Team Titles

- Liz Wolsfelt- Pharmacist
  - Oversee Retail Pharmacy, Clinical Pharmacy, Certified Asthma Educator, mySugr Coach
- Virginia Reeves- Case Manager
  - mySugr Coach, PCMH Care Management, Clinic Case Management, Outreach and Enrollment
- Nicky Willey- Licensed Practical Nurse
  - Clinical Programs Manager, QA, PCMH

What is Team Care?

"Team-based healthcare is the provision of health services to individuals, families, and/or their communities by at least two health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care"

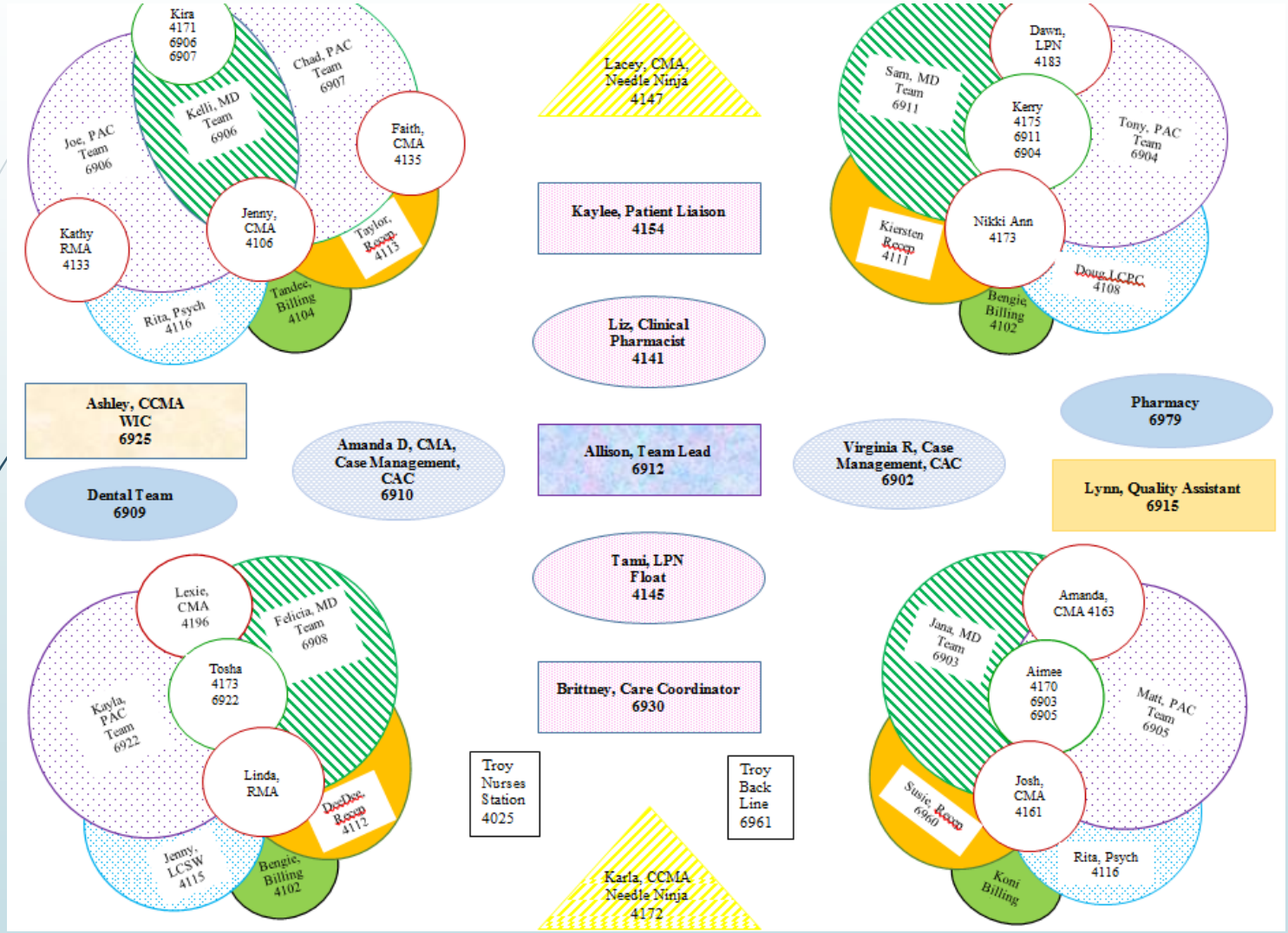
–Institute of Medicine

Core Principles & Values of Effective Team-Based Health Care Pamela Mitchell, Matthew Wynia, Robyn Golden, Bob McNellis, Sally Okun, C. Edwin Webb, Valerie Rohrbach, and Isabelle Von Kohorn* October 2012

NWCHC Team Structure

- Nine providers make up 4 teams
  - 2-3 providers (MD and PA)
  - CMA
  - CAA
  - Behavioral Health Provider
  - Clinical Pharmacy Provider
  - Case Management

NWCHC Team Structure



NWCHC QA Committee Structure

- Executive Director
- Clinical Programs Manager
- Compliance Officer
- Medical Director
- Chief Medical Officer
- Pharmacy Director
- Dental Program Manager
- Certified Medical Assistants
- Case Management
- Billing/Reception Staff
- Administrative Assistant
- Board Members
- Behavioral health
- IT

NWCHC QA Committee

- Discuss monthly quality and productivity data
- Discuss Complaints
- Discuss Quality Work
  - Adolescent Nutrition and Exercise Counseling – See PDSA Cycle #7
  - Asthma Pharmacological Therapy – See PDSA Cycle #3
  - Dental Caries – See PDSA Cycle #1
  - Colorectal Cancer Screening – See PDSA Cycle #5
  - A1C <9 – See PDSA Cycle #5
  - Immunizations – See PDSA Cycle #1
  - Family Planning Required Counseling – See PDSA Cycle #2
  - Depression Screening – See PDSA Cycle #1

NWCHC Team Care Projects- Integrating Technology into Healthcare

- mySugr Diabetes Project
- Hypertension Remote Monitoring Project

mySugr Overview

- Pilot program in collaboration with MPCA and BVHC
  - Mobile application that syncs with glucometer
  - Estimated hemoglobin a1c
  - Coaching
  - Unlimited testing supplies
  - Reporting portal for coaches and providers

https://mysugr.com/

NWCHC mySugr Process

- mySugr Team formed out of QA Committee
- Group discussed outreach and workflow process
  - Report totaling all patients with Diabetes
  - Initial outreach: a1c >9
  - Subsequent outreach:
    - A1c>7
    - Patient self-referrals

mySugr Outreach Process

- Phone outreach
  - Selling the program
- Provider referrals
- Outpatient pharmacy referrals
- Patient self-referral
  - Promotional materials placed around clinic and at pharmacy

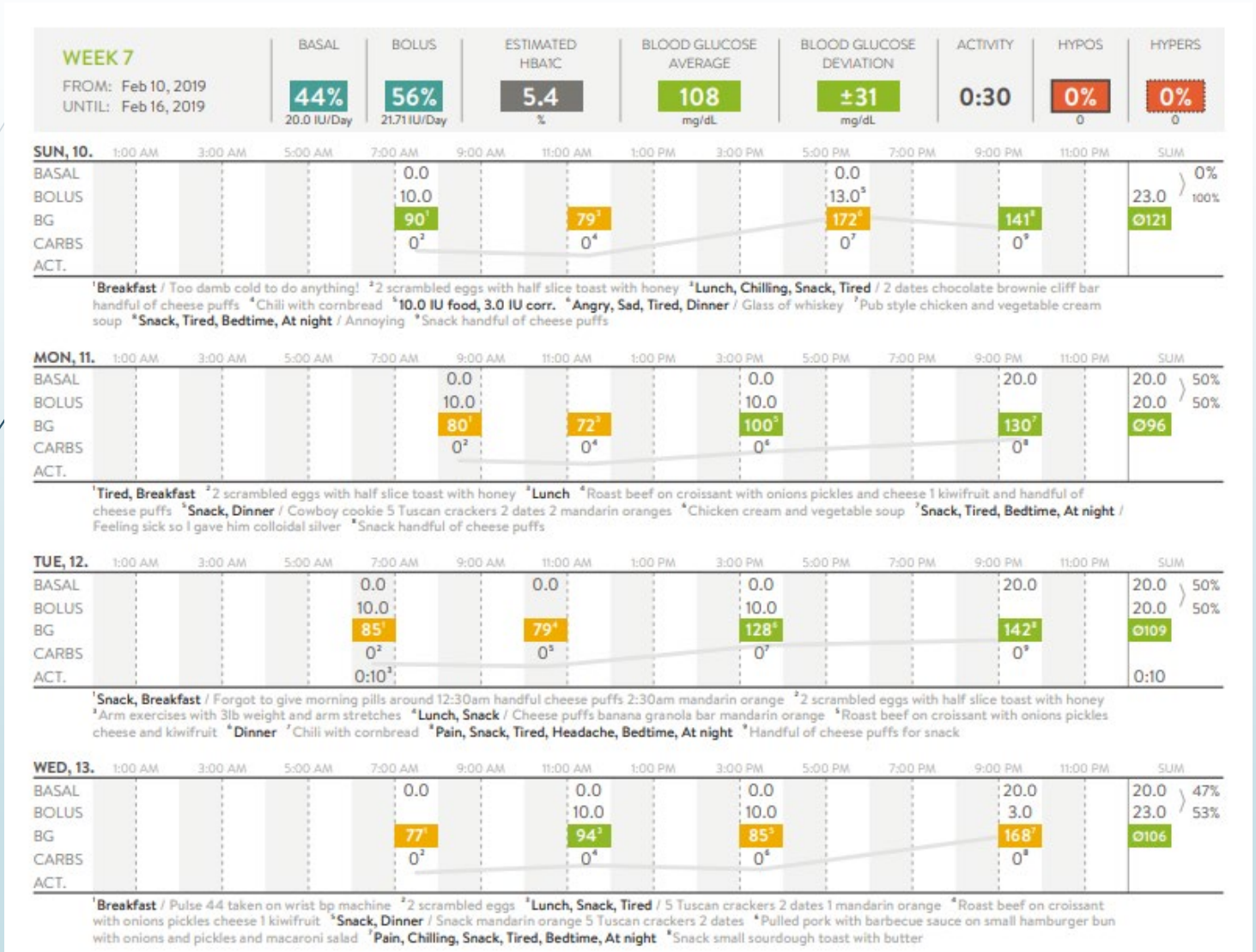
mySugr Enrollment Process

- Initial face-to-face encounter
  - Further discuss program
  - Download app
  - Application functions
  - Educate about supplies
- Bundle arrives approximately 1 week later, patient syncs glucometer, and testing begins

mySugr Follow-Up

- Monthly report to QA and Provider staff
- Periodic discussions with mySugr and Care Innovations Team to troubleshoot
- Monthly discussions with MPCA and BVHC
- Monthly follow-up with patient
  - Coaching
  - Self-management goals
  - Communication with providers

mySugr Blood Glucose Report



WEEK 7
FROM: Feb 10, 2019
UNTIL: Feb 16, 2019

BASAL	BOLUS	ESTIMATED HBA1C	BLOOD GLUCOSE AVERAGE	BLOOD GLUCOSE DEVIATION	ACTIVITY	HYPOS	HYPERS
44%	56%	5.4	108	±31	0:30	0%	0%
20.0 IU/Day	21.71 IU/Day	%	mg/dL	mg/dL		0	0

SUN, 10. (1:00 AM · 3:00 AM · 5:00 AM · 7:00 AM · 9:00 AM · 11:00 AM · 1:00 PM · 3:00 PM · 5:00 PM · 7:00 PM · 9:00 PM · 11:00 PM · SUM)

	7:00 AM	11:00 AM	5:00 PM	9:00 PM	SUM
BASAL	0.0		0.0		0%
BOLUS	10.0		13.0[5]		23.0 / 100%
BG	90[1]	79[3]	172[6]	141[8]	Ø121
CARBS	0[2]	0[4]	0[7]	0[9]	
ACT.					

[1] **Breakfast** / Too damb cold to do anything! [2] 2 scrambled eggs with half slice toast with honey [3] **Lunch, Chilling, Snack, Tired** / 2 dates chocolate brownie cliff bar handful of cheese puffs [4] Chili with cornbread [5] **10.0 IU food, 3.0 IU corr.** [6] **Angry, Sad, Tired, Dinner** / Glass of whiskey [7] Pub style chicken and vegetable cream soup [8] **Snack, Tired, Bedtime, At night** / Annoying [9] Snack handful of cheese puffs

MON, 11. (1:00 AM · 3:00 AM · 5:00 AM · 7:00 AM · 9:00 AM · 11:00 AM · 1:00 PM · 3:00 PM · 5:00 PM · 7:00 PM · 9:00 PM · 11:00 PM · SUM)

	9:00 AM	11:00 AM	3:00 PM	9:00 PM	SUM
BASAL	0.0		0.0	20.0	20.0 / 50%
BOLUS	10.0		10.0		20.0 / 50%
BG	80[1]	72[3]	100[5]	130[7]	Ø96
CARBS	0[2]	0[4]	0[6]	0[8]	
ACT.					

[1] **Tired, Breakfast** [2] 2 scrambled eggs with half slice toast with honey [3] **Lunch** [4] Roast beef on croissant with onions pickles and cheese 1 kiwifruit and handful of cheese puffs [5] **Snack, Dinner** / Cowboy cookie 5 Tuscan crackers 2 dates 2 mandarin oranges [6] Chicken cream and vegetable soup [7] **Snack, Tired, Bedtime, At night** / Feeling sick so I gave him colloidal silver [8] Snack handful of cheese puffs

TUE, 12. (1:00 AM · 3:00 AM · 5:00 AM · 7:00 AM · 9:00 AM · 11:00 AM · 1:00 PM · 3:00 PM · 5:00 PM · 7:00 PM · 9:00 PM · 11:00 PM · SUM)

	7:00 AM	11:00 AM	3:00 PM	9:00 PM	SUM
BASAL	0.0	0.0	0.0	20.0	20.0 / 50%
BOLUS	10.0		10.0		20.0 / 50%
BG	85[1]	79[4]	128[6]	142[8]	Ø109
CARBS	0[2]	0[5]	0[7]	0[9]	
ACT.	0:10[3]				0:10

[1] **Snack, Breakfast** / Forgot to give morning pills around 12:30am handful cheese puffs 2:30am mandarin orange [2] 2 scrambled eggs with half slice toast with honey [3] Arm exercises with 3lb weight and arm stretches [4] **Lunch, Snack** / Cheese puffs banana granola bar mandarin orange [5] Roast beef on croissant with onions pickles cheese and kiwifruit [6] **Dinner** [7] Chili with cornbread [8] **Pain, Snack, Tired, Headache, Bedtime, At night** [9] Handful of cheese puffs for snack

WED, 13. (1:00 AM · 3:00 AM · 5:00 AM · 7:00 AM · 9:00 AM · 11:00 AM · 1:00 PM · 3:00 PM · 5:00 PM · 7:00 PM · 9:00 PM · 11:00 PM · SUM)

	7:00 AM	11:00 AM	3:00 PM	9:00 PM	SUM
BASAL	0.0	0.0	0.0	20.0	20.0 / 47%
BOLUS		10.0	10.0	3.0	23.0 / 53%
BG	77[1]	94[3]	85[5]	168[7]	Ø106
CARBS	0[2]	0[4]	0[6]	0[8]	
ACT.					

[1] **Breakfast** / Pulse 44 taken on wrist bp machine [2] 2 scrambled eggs [3] **Lunch, Snack, Tired** / 5 Tuscan crackers 2 dates 1 mandarin orange [4] Roast beef on croissant with onions pickles cheese 1 kiwifruit [5] **Snack, Dinner** / Snack mandarin orange 5 Tuscan crackers 2 dates [6] Pulled pork with barbecue sauce on small hamburger bun with onions and pickles and macaroni salad [7] **Pain, Chilling, Snack, Tired, Bedtime, At night** [8] Snack small sourdough toast with butter

Total Patients Enrolled	Active Patients	Inactive Patients
36	25	11

Active Patients Age Distribution			
0-18 years	19-40 years	41-65 years	65+
0	2	18	5

Active Patients A1C	
Average Starting A1C	Average follow-up A1C
9.13	9.04

NWCHC Hypertension Project

- Collaborative practice agreement signed with Medical Director allowing pharmacists to manage primary essential hypertension
  - Carves out more complex hypertension
    - Secondary hypertension
    - Resistant hypertension
- Home Monitoring plays major role in hypertension management
  - White coat hypertension
  - More data points to guide therapy management
  - Guidelines recommend

NWCHC Hypertension Project

- Project formed out of QA Committee
- Purchased Blood Pressure Monitors to provide to patients
  - Varied sizes
  - Varied technology
- Ultimate goal is to integrate monitors with HER to have readings real time

Blood Pressure Devices

https://omronhealthcare.com/blood-pressure/

https://ihealthlabs.com/blood-pressure-monitors/feel/

Initial Visit

- Patient referred from Provider or Pharmacist
- Education, education, education
  - Need accurate results!
- Lifestyle modifications
  - DASH Diet
- Medication Adherence

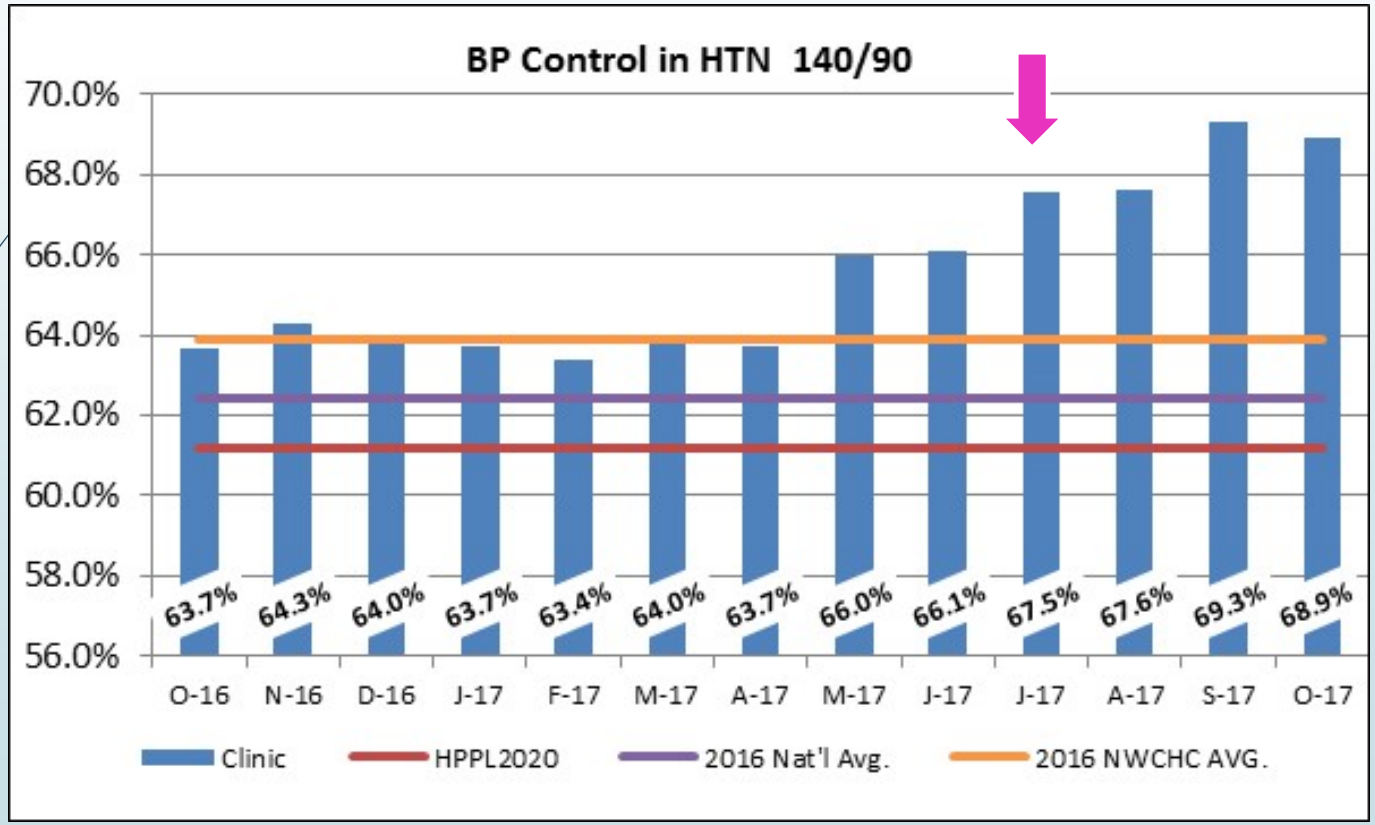
Follow-Up Visits

- Motivational Interviewing
- Education
  - Lifestyle modifications
  - Medication Adherence
  - Behavioral Health

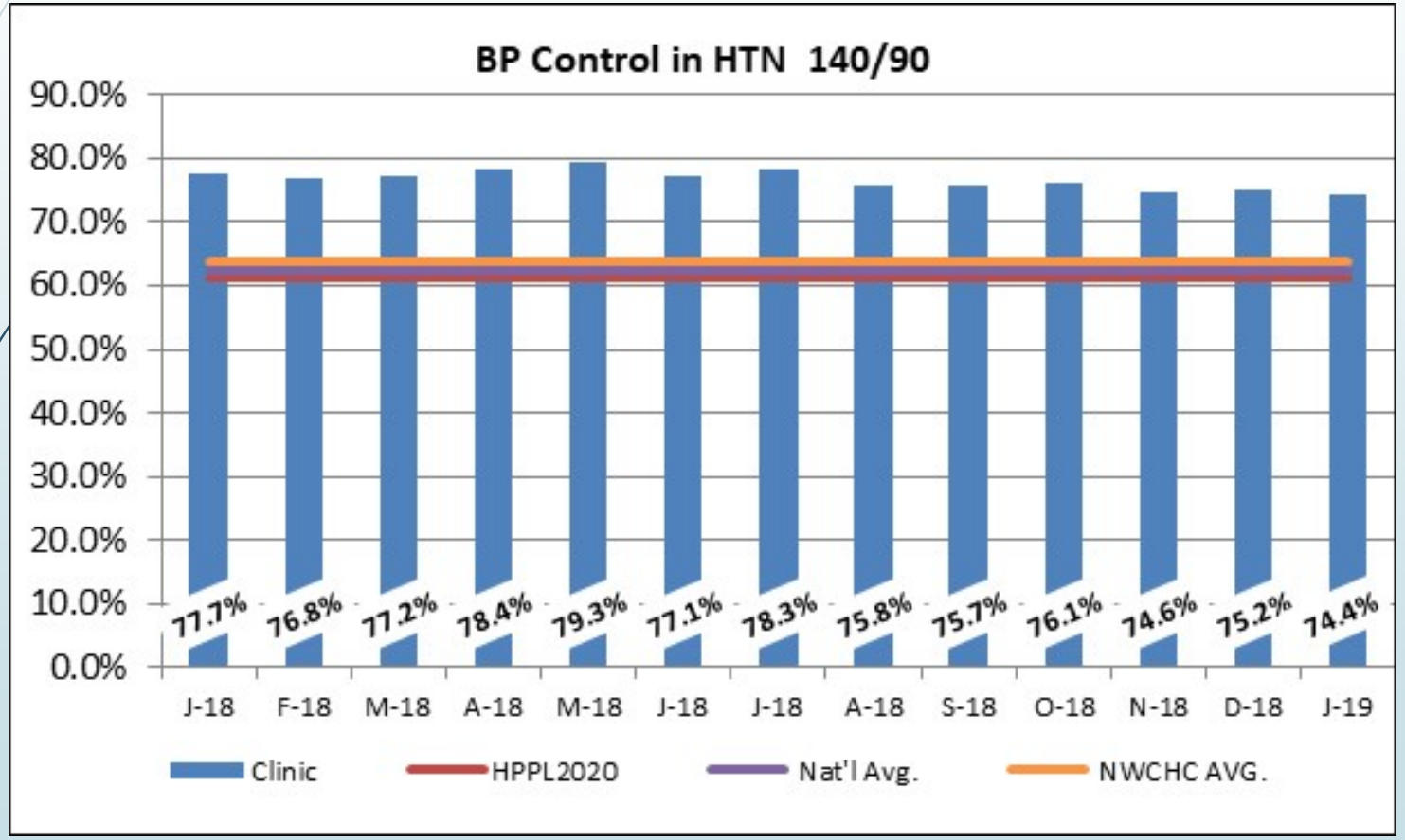
Communication

- All blood pressure results back to provider and team
  - Verbal communication
  - Written communication through EHR
- Involvement of Case Management
  - Transportation
  - Community Resources
  - Insurance Enrollment
- Involvement of Behavioral Health
- Involvement of Pharmacy
  - Medication costs
- Involvement of Dental
  - Referral for elevated blood pressures

NWCHC Quality Improvement Team Report



NWCHC Quality Improvement Team Report



Team Care Best Practices

- **COMMUNICATION**
- Interdisciplinary
- Administration support and involvement

Questions

Contact Information

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