# Together 2 Goal.

AMGA Foundation National Diabetes Campaign



# Monthly Campaign Webinar October 15, 2020

### Today's Webinar



- Together 2 Goal® Updates
  - Webinar Reminders
  - T2G Talk & Taste
  - Final T2G Fall Survey
- Optimizing Diabetes Care in 4 High Volume Primary Care Clinics of Henry Ford Health System
  - Pamela Milan, MBA, RDN, CDCES
  - Denise White Perkins, M.D., Ph.D.
  - Kate Zenlea, MPH, CPH
- Q&A
  - Use Q&A or chat feature



### Webinar Reminders



- Webinar will be recorded today and available the week of October 19<sup>th</sup>
  - www.Together2Goal.org
- Participants are encouraged to ask questions using the "Chat" and "Q&A" functions on the right side of your screen



### T2G Talk & Taste



### November 5, 2020

- Gather your team in-person or virtually – for our final T2G Talk & Taste
- Download our Talk & Taste kit and watch the T2G Highlights video
- RSVP at together2goal.org/ndoa



### Final T2G Fall Survey





### Today's Featured Presenters



Pamela Milan MBA, RDN, CDCES



Director, Diabetes Care
Connection Services
Department of Population
Health Management
Henry Ford Health System

Denise White Perkins M.D., Ph.D.



Vice Chair, Academic Affairs Associate Residency Program Director, Department of Family Medicine Henry Ford Health System

Kate Zenlea MPH, CPH



Managing Director, Global Health Initiative Henry Ford Health System

### **Optimizing Diabetes Care**

### Funded by Sanofi

**Principal Investigators**: Denise White Perkins, Vanita Pindolia, Pam Milan **Project Managers**: Doreen Dankerlui, Kate Zenlea (QI)





# **Henry Ford Health System**

- Founded in 1915 by auto pioneer, Henry Ford.
- Integrated health system
  - Provide health care delivery and health insurance, including acute, specialty, primary and preventive care services
  - backed by excellence in research and education.
- Six Regional Hospitals in four counties in SE Michigan.
- One of the nation's largest group practices, with more than 1,200 physicians and researchers in more than 40 specialties; 27 medical centers.
- 18,520 full-time equivalent employees; more than 30,000 total employees.
- More than 4.24 million outpatient visits annually.





### **Diabetes Profile**

- Type 2 Diabetes Population approximately 36,000
  - Gender: 47% male; 53% female
  - Age: 78 and under 82%
  - Race: Caucasian 50%; African American 37%
- Physicians/ APP providing diabetes care:
  - Primary Care approximately 185
  - Endocrinology
- Diabetes Related practices:
  - Diabetes Care Connection Services embedded in primary care
  - Clinical Pharmacy programs





### **Project Overview**

- Two-phase exploratory project
- Goal: identify and address key factors associated with uncontrolled diabetes among HFHS patients
- Phase I: quantitative and qualitative analysis of HFHS patients between 18-75 years with uncontrolled type 2 diabetes (as defined by last A1C result >8.0) with a primary care visit within 1 year
- Phase II: series of quality improvement processes in selected clinics to identify interventions that might address challenges identified in Phase I



### **Cohort Description**

### Primary Analysis:

- All uncontrolled HFHS diabetes type 2 patients
  - ➤ Defined as A1C>8 result
  - ➤ Date of last A1C>8 result defined as Index Date
- Ages of 18-75 years
- Primary Care visit within past 1 year
- Study period: 7/1/2014 to 6/30/2017





### **Cohort Description**

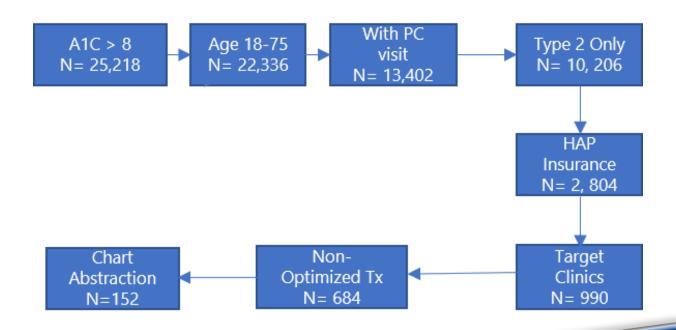
### Secondary Analysis:

- HAP insured patients (Claims Data)
- Detroit Northwest, Harbortown, K15 or Fairlane clinics
- Non-optimized groups:
  - ➤ Patients with A1c>8 on ≥ 2 oral anti-diabetic medications but not prescribed insulin
  - ➤ Patients prescribed insulin but still have A1c ≥ 9
  - ➤ Patients with A1c>8 who are not prescribed Metformin





### **Cohort Flowchart**







# **EMR Analysis - variables**

| Demographic characteristics  | Age; Race; Ethnicity; Gender; Median Household Income; Insurance   |
|------------------------------|--|
| Clinical characteristics     | BMI (score); Depression (score, diagnosis); Hypertension (diagnosis)   |
| Healthcare utilization rates | Primary Care visits (any provider); Primary Care Provider visits (assigned provider); Diabetes-related ER visits; Diabetes-related hospital admissions; Endocrinology visits; DCC visits |
| Provider treatment patterns  | Endocrinology referrals; DCC referrals<br>Oral meds; Metformin; Insulin  |





# **EMR Analysis - highlights**

| Demographic Characteristics |                     |       |  |
|-----------------------------|---------------------|-------|--|
| Age                         | Median              | 57.9  |  |
| Race                        | Black               | 40.8% |  |
|                             | White               | 45.3% |  |
|                             | Other               | 6.1%  |  |
| Ethnicity                   | Hispanic/Latino     | 3.1%  |  |
|                             | Not Hispanic/Latino | 88.0% |  |
| Gender                      | Female              | 47.6% |  |
|                             | Male                | 52.4% |  |
| Median Household            | [658-7628]          | 20.0% |  |
| Income by Quintiles         | [7662-10320]        | 20.2% |  |
|                             | [10351-12479]       | 19.3% |  |
|                             | [12499-15262]       | 20.6% |  |
|                             | [16067-23742]       | 19.9% |  |
| Insurance                   | Medicaid            | 11.2% |  |
|                             | Medicare            | 15.0% |  |
|                             | Medicare Advantage  | 8.0%  |  |
|                             | HAP Medicare Ad.    | 9.4%  |  |
|                             | HAP                 | 21.8% |  |
|                             | Blue Shield         | 27.1% |  |
|                             | Other               | 7.5%  |  |





# **EMR Analysis - highlights**

| Clinical characteristics     | 71.1% are obese<br>95.7% did not have depression at time of Index Visit; 13.4% had<br>depression diagnosis in year prior to Index Date<br>73.2% had hypertension diagnosis in year prior  |
|------------------------------|---|
| Healthcare utilization rates | ~41% of patients had less than PC 6 visits in 3 years prior<br>~79% saw their assigned PCP at least 1 time in 3 years prior<br>~16% had 1 or more DM related ER visit<br>~11% had 1 or more DM related hospital admission<br>~17% had at least 1 DCC visit in year prior<br>~11% had DCC visit in year post |





# **EMR Analysis - highlights**

| Provider referral/prescription patterns  | Pre Index Date                          | Post Index Date                      |
|--|---|--------------------------------------|
| Referral to Endocrinology Referral to DCC  Prescribed at least 1 oral medication Prescribed Metformin  Prescribed insulin  Prescribed ≥2 oral meds and not prescribed insulin Not prescribed Metformin (no allergy, GFR < 30)  Not prescribed insulin with A1C ≥ 9 | ~13% ~37% ~88% ~65% ~50% ~13% ~28% ~30% | ~5% ~15% ~70% n/a ~51% ~22% n/a ~13% |

| Provider referral/prescription patterns | A1C = 8-9   | A1C = ≥ 9   |
|---|-------------|-------------|
| Referral to DCC                         | ~32% (~12%) | ~39% (~17%) |
| Prescribed Insulin                      | ~44% (~44%) | ~53% (~55%) |





# **HAP Claims Analysis - highlights**

Claims analysis for a subset of HAP-insured patients

| Insulin Prescriptions Ordered          | Number of Rx | Unique patients | Drop Off    |
|--|--------------|-----------------|-------------|
|  | 739          | 174             |             |
| Prescriptions Filled within 6 months   | 277          | 119             | 462 (62.5%) |
| Prescriptions Refilled within 3 months | 72           | 70              | 205 (74.0%) |
| Prescriptions Refilled within 6 months | 48           | 39              | 24 (35.1%)  |

| Insulin Prescriptions filled (by clinic)  |              |          |          |          |          |
|---|--------------|----------|----------|----------|----------|
| # of patients                             | Total (2804) | K-15     | Ford Rd. | DNW      | HTWN     |
| w/Rx ordered in year prior to Index Date* | 967          | 109      | 135      | 81       | 42       |
| w/Rx filled in year prior to Index Date   | 655 (68%)    | 81 (74%) | 89 (66%) | 49 (60%) | 24 (57%) |
| w/Rx filled in year post Index Date       | 644 (67%)    | 84 (77%) | 84 (62%) | 53 (65%) | 26 (62%) |





# Summary of Key **Quantitative Analysis Findings**

- Low referral rates to diabetes education services
- Low visit rates for diabetes education
- Under-prescribing of insulin
- Low insulin prescription fill and refill rates (existing and new Rx)





# **Qualitative Analysis**

- Chart review
  - random samples of non-optimized patients from Detroit Northwest, Harbortown, K15 (AIM) and Ford Road clinics
- Key informant interviews selected clinic staff
- Surveys primary care providers in target clinics





## **Chart Review - highlights**

#### Non-optimized groups:

- Patients with A1C>9 and not prescribed insulin:
  - Infrequent documentation of insulin start up discussion
- Patients with A1C>9 while having been prescribed insulin:
  - Very infrequent documentation of plan for adjusting or titrating insulin
- Patients who were prescribed insulin after Index Date (new starts)
  - Frequent documentation about use of insulin but limited mention of how patient is taking or dose patient is taking
  - Adherence noted for ~half of patients





# **Survey - Findings:**

 Providers surveyed identified low health literacy, social and environmental factors and patient non-adherence as major issues How much do you think the following issues attribute to the success or failure of patient control of diabetes?

|                                      |        | SOMEWHAT | VERY LITTLE | NOT AT ALL |
|--------------------------------------|--------|----------|-------------|------------|
| Patient Beliefs, Culture and Value   | 59.09% | 36.36%   | 4.55%       | 0.00%      |
| Low Health Literacy                  | 81.82% | 18.18%   | 0.00%       | 0.00%      |
| Language Barriers                    | 22.73% | 50.00%   | 22.73%      | 4.55%      |
| Patient Social/Environmental Factors | 77.27% | 18.18%   | 4.55%       | 0.00%      |
| Provider-Patient<br>Communication    | 45.45% | 45.45%   | 9.09%       | 0.00%      |
| Staffing/Clinic Set-up               | 36.36% | 36.36%   | 27.27%      | 0.00%      |
| Access to Appointments               | 45.45% | 36.36%   | 18.18%      | 0.00%      |
| Length of Visit Time                 | 31.82% | 54.55%   | 9.09%       | 4.55%      |
| Insurance                            | 45.45% | 40.91%   | 13.64%      | 0.00%      |
| Health Policy                        | 50.00% | 36.36%   | 4.55%       | 9.09%      |
| Not Following Treatment<br>Protocols | 61.54% | 30.77%   | 7.69%       | 0.00%      |





# Main Opportunities Identified during Phase I

- Under-prescribing of insulin by providers (initiation and titration)
- Under-referral to diabetes education services by providers
- Insufficient initiation of insulin treatment, even when prescribed by providers
- Abandonment of insulin therapy by patients after initiation





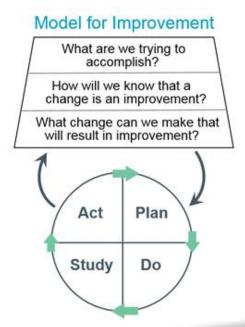
# PHASE II – TESTS OF CHANGE INTERVENTIONS





### **Continuous Quality Improvement**

- Series of Plan Do Study Act (PDSA) cycles in target clinics
- Goal: identify process improvements to address primary drivers identified in Phase I
- Repeated small cycles of testing a theory
  - First gain confidence that a change is an improvement, then run larger tests under a variety of conditions







### **Process**

- PDSAs developed and implemented in collaboration with the project team, HFHS providers/clinic team, diabetes educators and additional diabetes care management staff based in target clinics
  - Meetings held with clinic operational leads to review Phase I key findings and to better understand their perspective of challenges
  - Each clinic was assigned one of the identified challenges to address
  - Key persons were identified to participate in CQI Design Teams
  - Teams developed block diagram focused on clarifying current process for diabetes care at their specific site in detail
  - Teams then generated change ideas to test and measure using PDSA cycles





### **Focus Areas**

- Detroit Northwest
  - Increase number of patients being referred to DCC
  - Increase number of referrals turned into scheduled appointments
- Academic Internal Medicine (K-15)
  - Reduce the number of no-shows at DIAC
  - Improve retention of patients referred to insulin titration program
- Ford/Fairlane
  - Increase number of insulin prescriptions written by providers
  - Increase number of patients who successfully fill their new prescription and adhere to insulin therapy





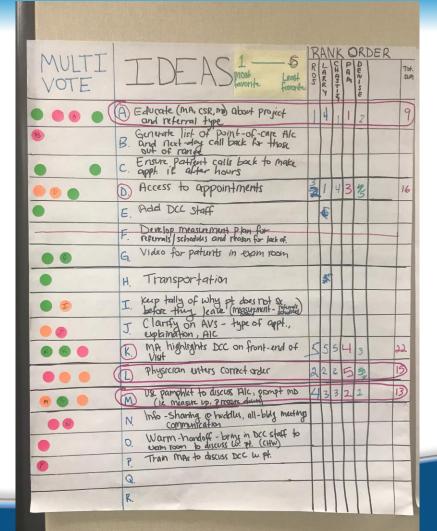
# **QI Process: Block Diagrams**

#### Check A1c based on: -Problem List Draw A1c: Physician reviews chart Physician refers patient to D.C.C. appointment is -Med Rec -Clinic (during appt) and A1c to determine Patient goes to D.C.C. D.C.C. scheduled -Diagnosis -Lab (after appt) necessary referrals -Patient interview -Sx'ed appt type If during office visit, Staffing · Difficult to catch patients once A1c · Physician makes wrong type of · Patient takes referral form to front Co-pay discuss directly with Time constraints in checking all results (6 minute test in clinic) referral desk to schedule appointment--may · Lack of transportation patient · Not enough equipment · Physician does not explain referral leave without scheduling · Lack of health literacy · Burden of co-morbids (A1c · Access to A1c equipment · CSR makes wrong type of · Lack of knowledge, skills, attitudes type to patient If after office visit. becomes a lower priority during · Not consistently checked · MA's are not reinforcing referral or appointment to understand and practice coordinate referral · Patient does not always go to the · Lack of appointment availability reviewing AVS learnings from center and inform patient Two check-points: lab after visit (preferred time and location) Do not know who contacts patient · No transportation to come back for MA after referral Physician A1c No automated referral based on · D.C.C. is not involved in specific Patient refuses A1c and states that threshold program that patient is referred to they choose to work on their diet Patient refusal · No clear history of previous Lack of physician discussion with involvement in D.C.C. · No consistency in timeframe · Time consuming to find this patient between A1c checks information · Documentation is not consistent · Physician does not always offer D.C.C. to patient





# QI Process: Structured Brainstormin g







### **Intervention Mapping**

Reduce # of eligible patients that are not using DCC services (DNW)

Reduce # of insulin titration program no-shows + dropouts (AIM)

Reduce # of eligible patients that are not initiating and adhering to insulin therapy (FF) Providers not making referrals

Referred patients do not make appointments

Patients do not show up for appointments at DIAC

Patients are difficult to reach for monitoring

Providers are not prescribing insulin to eligible patients

Patients are not filling their prescriptions

Place pamphlet on keyboard to prompt providers

Arrange warm hand-off to CHW to assist with making appointments

Arrange warm hand-off to CHW to better educate patients about importance of appointments

Use My Dose Coach (app) to monitor adherence to medication

Additional follow up/outreach to patients w/high A1C after visit (30 day return)

Insulin teaching after visit

Assist patients with insurance issues



Reduce # of

uncontrolled type 2

diabetes patients



### **AIM PDSAs**

| Aim Statement | By March 2019, the AIM team will decrease the number of type 2 diabetic |
|---------------|---|
|               | patient "no-shows" who are on insulin at the DIAC program by 10% from   |
|               | baseline (60%).   |

| Description | Warm-handoff process to the DIAC RN during a patient clinic visit   |
|-------------|---|
| Status      | Abandoned – DIAC RN left position during PDSA. Clinic Lead decided to focus on My Dose Coach pilot instead. |
| Results     | No-shows=25%  |





# Ford Rd PDSAs (1)

| Aim Statement | By February 2019, we will increase the number of type 2 diabetic patients with an |
|---------------|---|
|               | A1c>9% who are prescribed to start insulin. We will also increase the number of   |
|               | eligible patients who have successfully filled and adhered to their new insulin   |
|               | prescription at the Ford Fairlane clinic in Dearborn, Michigan.                   |

| Description | Outreach to eligible patients to schedule f/u appt within 30 days for disease management and insulin teaching |
|-------------|---|
| Status      | On Hold; transitions within clinical team   |
| Results     | Total 30-day return visits scheduled of eligible patients=92%   |





# Ford Rd PDSAs (2)

| Description | Introduce tracking tool for provider to complete after visit to provide necessary info for RN to initiate teaching   |
|-------------|--|
| Status      | Completed  |
| Results     | Satisfaction Survey Pre-test: 12% indicated they were very satisfied with the current process  Satisfaction Post-test: 93% indicated they were very satisfied with the new process  Tracking tools received= 87% All necessary info received=85% |

| Description | Distribute new 'Insulin RX Fill Handout' to patients during insulin teaching |  |
|-------------|--|--|
| Status      | In process   |  |
| Results     | Filled insulin prescriptions=83%   |  |





### **DNW PDSAs**

| Aim Statement | By May 2019, we will increase the number of active type 2 diabetic patients referred to the DCC by 10% from baseline (51%). We will also increase the number of diabetes service referrals that turn into scheduled appointments by 10% from baseline. |
|---------------|--|
| Description   | Leave card w/A1C result on provider desktop to prompt diabetes referral  |
| Status        | Abandoned; determination made that intervention must start further upstream (outside scope of work)  |
| Results       | Referrals made=67%   |
|               |  |
| Description   | Introduce warm hand-off to Community Health Worker to address barriers to making DCC appointment   |
| Status        | Completed/in-testing   |
| Results       | Referrals made=61% Scheduled appointments=100%   |





### Successes PDSA Approach

- Opportunity for teams to experiment and test out new change ideas
- Increased staff enthusiasm
- Tests completed with minimal expenditure of resources and without taking great risks
- Development of new clinical materials
  - Insulin teaching checklist
  - Insulin prescription handout
  - Standardized CHW warm-handoff workflow





## **Challenges PDSA Approach**

- Identification of workflow problems beginning further upstream
- Ownership no assigned QI team leads in all settings
- Communication with teams difficult
  - Knowledge/sharing of pre-existing workflows/protocols
  - Successfully inform/equip all staff directly involved in test
    - Rotating Medical Assistants
- Time
  - Development/design prep necessary before launch of test
  - Difficulty getting large enough sample sizes
  - Limited time for teams to dedicate to tests





### **Lessons Learned from Interventions**

- Clinical inertia not just a provider issue; need to identify gaps in team workflow/communication
- Patient centered warm hand-off to team member is important for engaging patient in treatment or referral plan
- Anticipate barriers to medication adherence and provide information/resources and teaching in advance
- Need to monitor for treatment abandonment and nonadherence



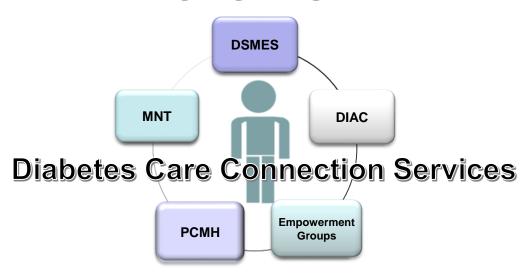


## **CURRENT INITIATIVES IN DIABETES CARE**





# Diabetes Care Connection (DCC) Overview



KEY

Medical Nutritional Therapy – MNT Diabetes in Active Control – DIAC Patient Center Medical Home – PCMH Diabetes Self-Management Education & Support – DSMES

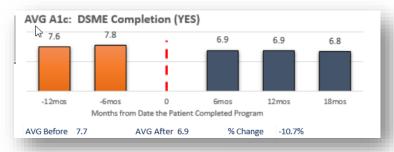
Lifestyle Modification – Behavior Change

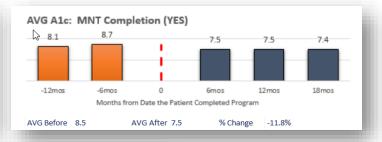




## **DCC Management Success**

### Services work if we can engage the patient













Leslie Grijalva Community Health Worker (CHW)



### **Warm Handoff**

- DNW site has a CHW in DCC program
- Warm Handoff:
  - PCP identifies potential patient for services.
  - Leslie meets patients and explains program
  - Screens for barriers of engagement
- Launching social determinants of health screening in Epic within DCC and case management







# MDHHS Study to Profile: DCC Referrals, Engagement, Enrollment

- Look at DCC referrals October 1, 2018 and September 30, 2019 was N = 3,769 subjects
- Comparing to those who completed, we then examine demographic characteristic of three groups:
  - participants that are never contacted or decline to make appointment (no contact)
  - participants that were contacted but never completed a session ("no show")
  - participants that were contacted and completed at least one session (Incompletes)





## **Key Findings**

- "No contact" group were likely to be under 50 years old.
- "No show" group were likely to have Medicaid insurance or be younger and Black/AA.
- "Incompletes" group were likely to be under 62 years old and/or have higher A1c.





## **Next Steps and Planned Interventions**



Outreach for referrals to include texting patients



Program culture change to "individual plan & coaching" approach



Social determinants of health screening (SDOH) initiative

CHW to screen "no shows" for SDOH





### **Lessons Learned**

- Key elements to optimize diabetes care:
  - Personalized patient touch
  - Team Communication and coordination
  - Address patient barriers to care and self management





#### November Webinar



- Date/Time: November 19, 2020 from
   2-3pm Eastern
- Topic: Addressing Kidney Health in Type 2 Diabetes: Gaps between Guidelines and Clinical Practice
- Presenters: AMGA Analytics



### Questions



