Guest speaker from PCORI Health System Demonstration Project, Maureen Smith – Variation in case management programs and their effectiveness in managing high-risk patients, quantitative results

- Question: Are case management programs valuable to health systems?
  - Most systems have these
  - Goal: Can we streamline the process of answering these questions with PCORNet data
- To what does case management prevent high cost events for patients enrolled in Medicare ACOs? Examined three case management programs
- As affordable case active went out there were incentives for health systems to change their care for patients
  - They could improve care
  - They could reduce cost back to Medicare
- General approach was to do a comparison group study to start with individuals enrolled in case management, and then find other similar patients without case management for a year after management begun and to measure and compare outcomes
- Enrollment sociodemographics
  - Wisconsin ages were a bit younger, Boston was the highest
  - Wisconsin had the most non-white, and Iowa had the least
  - Genders were about the same across the three institutions
- Enrollment mental health
  - As more Medicaid (managed by the state and for low-income people, this was part of the affordable care act) patients increased, more patients were affected by mental health issues
    - Many more people are insured now than before the ACA
    - Issues changed as Medicaid was added instead of just Medicare – more mental health
      - About 50% have depression
      - Around 30% have psychosis
      - Other neurological disorders are around 35%
    - Other major conditions were added
      - Sites with longer running programs had many more patients in these groups
- Compared CDM & Claims for Wisconsin CCM Patients
  - Claims are required for outcome analysis
  - Every visit generates a bill that goes to the insurance office, after paid this turns into a claim. Insurance company knows every in-patient hospital visit and emergency room visit everyone has had. This can be found in claims data.
  - If you want to track outcomes and use the PCORnet CDM model as a basis, you really need to think about adding claims data so outcomes can be measured
No way to benchmark how we were doing in case management programs without combined CDM and claims data

- The number of events prevented by case management was studied; Wisconsin – 68, Iowa – 30, Wisconsin 12 months – 144
  - This is an average of 10% of visits prevented
- Case management programs are very expensive as it is very comprehensive care, and none of it is paid for by Medicare – it is an expense for the health system that risks not being paid by the patient
  - Success prevents further visits which further loses money for health systems
  - Need to be sure these measures are helping the right people
  - Health systems hope that eventually these programs will backed by more funds so it will not be such a loss financially
- In another study by PCORI, who was benefitting was studied for 6 months
  - In Low benefit group 166 (1/3) individuals got a lot of benefit from case management programs
  - In High benefit group (2/3) individuals didn’t get a lot of benefit
  - Who is this program not working for? If we can identify, we can enroll these people in different programs that might be more beneficial

Conclusions

- Patient characteristics varied immensely among programs
  - CDM data can be used to compare patients across systems
- Case management programs are associated with lower event rates
  - Claims data is required for evaluation of outcomes
- A subset of patients can be identified that have lower event rates after enrollment in case management
  - These patients were not high-risk
- In the health care system we have tended to say you are sicker if you cost more
  - There are conditions where this breaks down which is why patient reported outcomes are becoming more prominent
  - Some chronic conditions don’t require a lot of system care but have a significant impact on the quality of life
- Can you audit programs of case management?
  - It is currently all about case managers and patients getting together to set goals and get that person’s diseases under control, and giving them resources to be able to go after this
- Each site had to go to the case management registry to identify individuals enrolled so three sources of data were utilized
  - Claims data
    - There is a large lag in getting this information - often 2-3 years
  - CDM data
  - List of patients enrolled
    - This was a criteria – this is often not desirable for investigators
Many contacts were made by telephone, but there was no way to track how long these calls took
- Need to know numbers of encounters and types of encounters
- What are patients interested in as far as how they are effected? Concerns or issues?
  - Seems that many of these issues have to do with much more than the person’s help – this would be good for a community involvement project
  - There are often very poor measures of socioeconomic features because it is very difficult to get this information
    - If more could be interpreted, there could be a lot more information on who is benefitting as opposed to those who are not
    - We don’t have great measurement on any of these factors nationally
- What definition was used for engagement? The term is very nebulous
  - First part of the project was to determine what case management programs are doing – there is very different vocabulary across sites
  - Focused most on programs’ activities – when case managers were interviewed they tended to frame it as whether or not they could get someone on the telephone
    - If someone did not answer or call back, that was viewed as a lack of engagement
  - Does resource management help with setting and reaching goals, or does it just give the patients a list of things to do?
- Patients were interviewed during the site visits
  - There are more case management workers coming along to work with immigrants and who speak foreign languages
- Russ Waitman - Structure of the GPC and PCORnet going forward
  - New foundation – People Centered Research Foundation (PCRF)
  - The original funded contract for the GPC was an 18 month commitment, and we were then funded for an additional 3 years
    - The contract will end early next September
    - PCRF has been given funding by PCORI to continue to fund the work of these projects
  - Sustainability transition plan
    - PCORI as well as CDC, the FDA, etc. will want to use the network to bring in more money
    - As more people start using these purposes, there will hopefully be a lot less need from outside agencies needing to provide funding as we will be able to become more sustainable as our individual CTSAs can help us gain income from CTSAs help with NIH
    - As we move along, we are becoming more aware of missing information
      - PCORnet discovered we need to know what insurance companies were billed for – what procedure was done and what part did insurance pay?
      - These networks support national front door as well as our investigators
  - New foundation will support different types of network – look at things at the network level, and also at the level of the Site
- PCORI contracts work, but if they want PCORnet to be a bit more nimble in their contracts with smaller foundations and industry
  - The old contractual system is out of sync for groups we are wanting to reach
  - The new contract will make it much easier to connect with the desired groups we want to work with
  - Foundation has a board of directors
    - Contracts will continue in much the same way, but will go through PCRF to get to the GPC – they will be managing relationships between networks and program officers
  - Sustaining should be meeting all customers but also retaining current customers
    - If you are a high level partner, opportunities will come along for nationwide studies. Individual sites may be interested based on budget, etc.
  - CDM will need to be kept up to date and refreshed every 3 months and we will need to respond to PopMedNet queries
    - Data will continue to be added to CDM (CDM 4.0)
    - Initial models will have ~15k to keep network together and there will be monthly calls to connect groups and keep everyone involved
    - Some activity will be site level and others will be for the whole network
  - We would like to change the structure so KUMC is less in the middle, but we have a more member oriented structure
    - We will set expectations for GPC members (engagement, data network with the right capabilities, need to be sustainable, there may be different levels of membership)
    - What are the costs above and beyond what would be normally already done at their site?
      - Calls
      - Extra dev work
      - Meeting expenses and coordination
    - There will be a site cost to help upkeep administrative and support activities, but that will provide opportunity to work at a broader level
      - We still need to determine what this per site cost would entail
      - We can ask other sites to also join when we have this cost figured out along with benefits they would receive