

Background

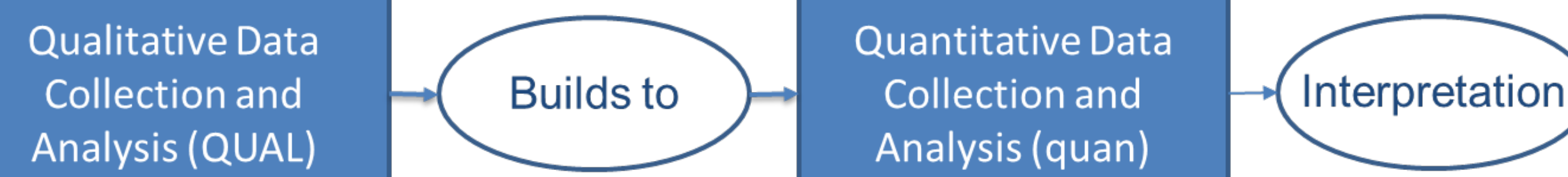
- Low proportions of diabetic (T2DM) patients (2-10%) meet 3 ADA clinical **targets**^{1,2} – ↓ risk of disease progression
- Psychosocial factors** are the 1) psychological factors – how one feels, and 2) social factors – social milieu³
- Psychosocial factors affect T2DM **outcomes**, primarily through influence on **self-care** behavior^{4,5,6,7}
 - Neighborhood: unsafe housing, barriers to healthy foods & recreation -> poor diet & low physical activity^{8,9,10}
 - Social support: FBG monitor, meal prep -> Rx/Tx adherence¹¹
 - Low SES: stressors -> various physiological processes¹²
- Acknowledged (i.e., IOM¹³, physicians¹⁴) **need for better collection, analysis and use** of psychosocial information – emotional health, stressors, barriers to self-care
- We know little of how **providers consider** psychosocial factors in their chronic care decisions
- Understanding provider perceptions will help **inform current and future health informatics capabilities** – to effectively **extend capabilities of personalized medicine** to include patient's social/cultural characteristics

Research Questions

- In which **situations** are psychosocial factors considered?
- How do providers **access** and **use** psychosocial info. (PI)?
- Which psychosocial factors do providers believe are **important** in treating adult, T2DM patients?
- How does **EHR influence** collection and use of PI?

Methods

- Exploratory sequential design** - qualitative data collected initially, followed by quantitative data collection
- Physician **interviews**, **Online provider survey**



Data and Results

- Individual physician interviews: 1-16 years of experience; specialties—Family Med., Internal Med., Endo. (N=17)
- Online survey: MD/DO, PA, NP, RN, pharmacist (N=229)

Literature Cited

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Picture Sources: <http://www.sjhlex.org/sitemaker/websitefiles/sjhc10001/hospital-foundation-who-support>; <http://www.kevinmd.com/blog/2014/10/blocking-emr-interoperability.html>

- Psychosocial factors (PF) considered in **certain circumstances** – not considered if patient is “doing well”
 - Considered for: complex patients, those not at goal, ‘spike’ in A1c
- Patients share psychosocial information (PI) within clinician-patient relationships characterized by patient **autonomy** and **privacy** – specific techniques enable this
- Awareness of PI **triggers** clinical decisions (i.e., HbA1c target, referrals to Rx assistance)
- EHR **impedes** ability to capture psychosocial information (PI)
 - EHR does not allow providers to document, or access, the patient’s **story** – important to understand self-care barriers

When is Psychosocial Information Considered?

When patient is **uncontrolled**, or not reaching clinical goals. Not considered if patient is controlled or at goal.

... issues [for] a complex patient. You might be depressed, you might just be wanting to die quickly. So that's we need to address (P03)



... for those patients who either historically have had great successes with their sugar control, and then all of a sudden they're having a quarter where their A1c jumps up (P02)

If a patient is already well-controlled ... his A1c is good every time. We really don't think much beyond that (P04)

Personalized care: 1) **informing** development of decision support tools, and 2) enhance clinical **training** for importance of PFs in clinical decisions

How is Psychosocial Information Accessed?

Granted through **continuous, trusting** clinician-patient relationship. *It's kind of weird ... unlocking of someone's trust ... you have to have trust in order to get to the truth about someone's psychosocial factors. (P09)*

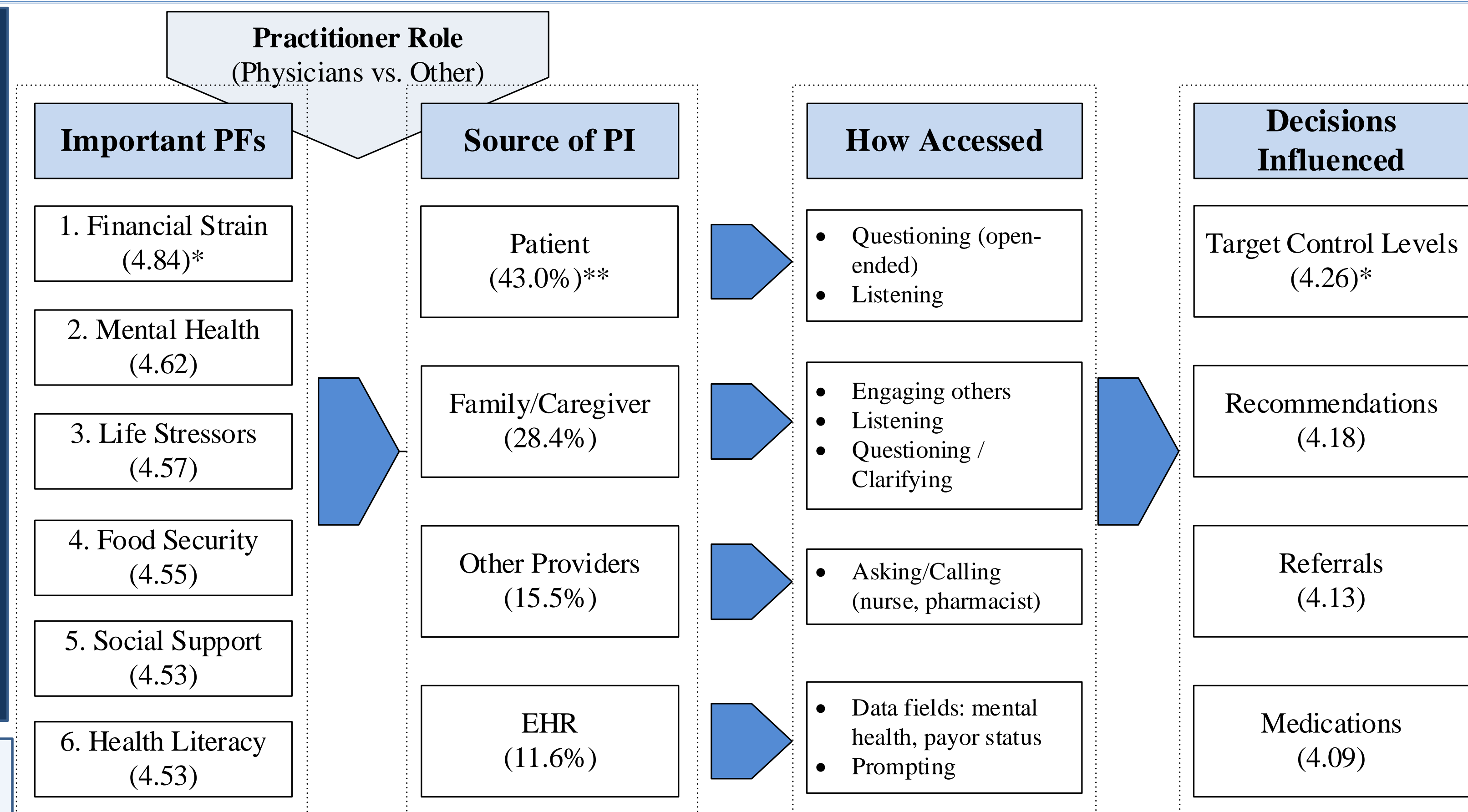
PI access has **not been examined** for T2DM care, low engagement possible **quality driver** - poor control. Describing techniques used to **promote engagement** help expand capabilities of decision-support tools.

How is Psychosocial Information Used?

PI informs **specific** care decisions – to address barriers to care.

All intakes get questions about fear of becoming homeless ... we refer them to Social Work for early intervention ... it's a great system. (P07)

Clinicians **do** consider costs. Decision-support tools **could** enhance patient relationships and engagement via collection and use of PI.

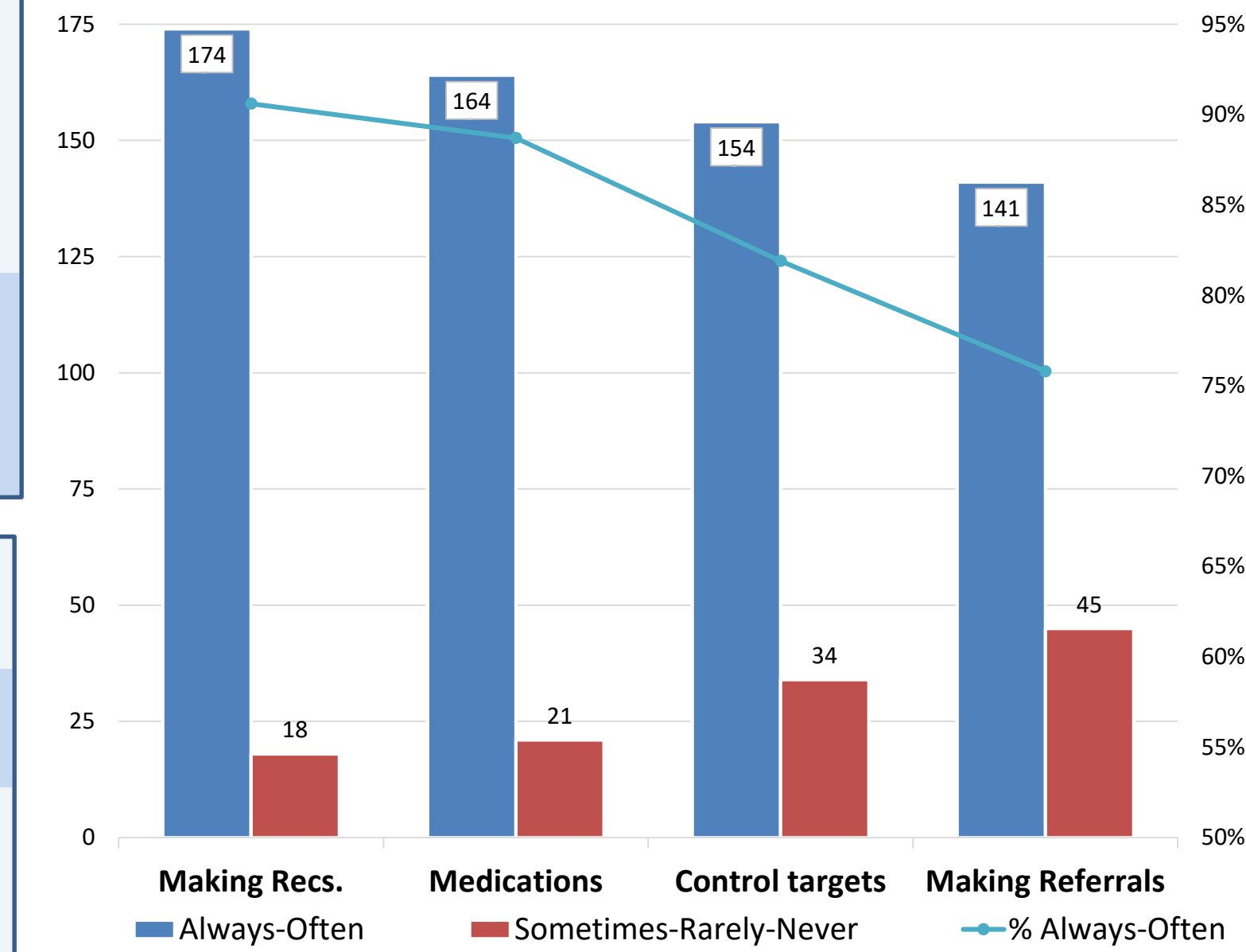


Access to Psychosocial Information

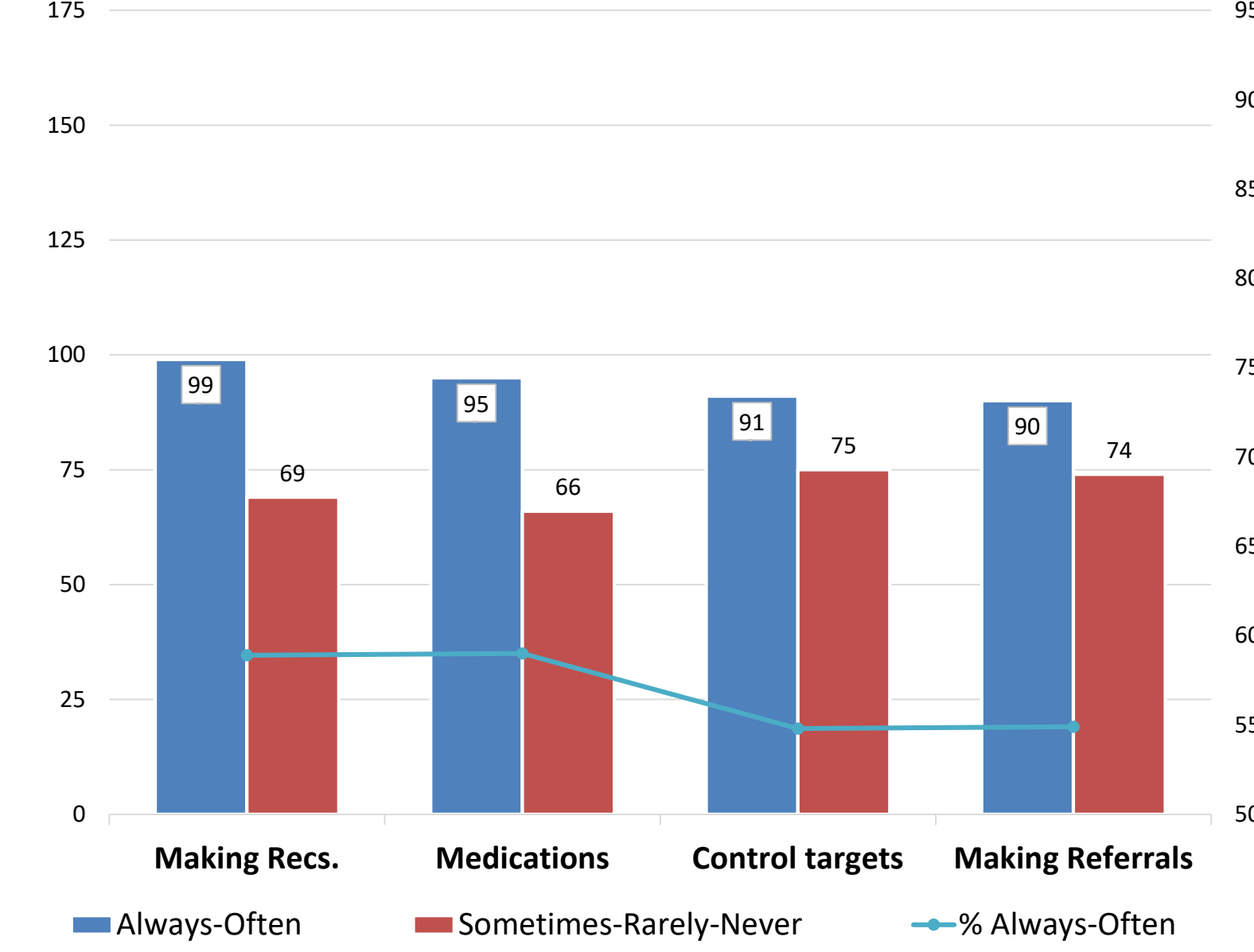
Confident in Accuracy of PI		Availability of PI	
1. Patient – consultation	(4.16; 89.3%)*	1. Medications	(3.70; 59.0%)*
2. Other providers	(4.09; 81.8%)*	2. Making Recommendations	(3.69; 58.9%)*
3. Family/caregivers	(4.00; 84.3%)*	3. Target level of control	(3.63; 54.8%)*
4. Patient-self-reported tools	(3.86; 76.1%)*	4. Making Referrals	(3.62; 54.9%)*
5. EHR	(3.86; 69.9%)*		

* - Mean of responses to Likert scale responses: 5 – Very Important, 4 – Important, 3 – Neither Important nor Unimportant, 2 – Unimportant, 1 – Very Unimportant
 ** - % of Total Source Responses. Respondent could indicate more than one source.
 *** - Responses captured in a Likert scale: 5 – Always, 4 – Often, 3 – Sometimes, 2 – Rarely, 1 – Never

How often PFs influence decisions



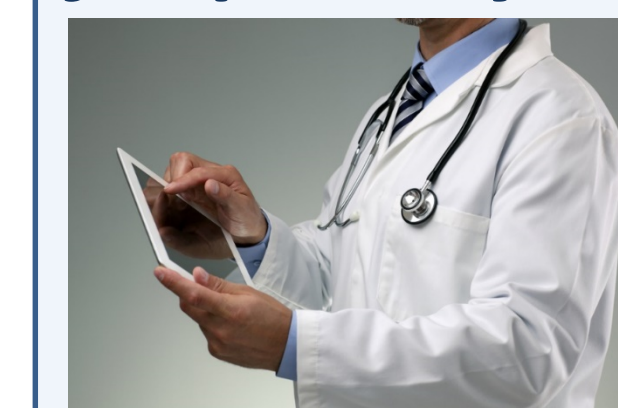
Do you have the PI you need?



How Does the EHR Support Collection & Use of PI?

Migration/use of EHR has had dramatic **unintended consequences** concerning use of psychosocial information – missing patient’s **story**

You can code for narcotic or tobacco addiction, but there's not one [field] for poverty ... or shelter insecurity. So we missed the boat (P09)



... it's buried ... not very helpful ... 'cause it's just more in my head than it is in an accessible way in the chart. (P08)

... problem with templates ... is the person who created the template, his thought process may not be that of the other person.

So, unless you become familiar with [the template], many who use it once say, "No, it's not how I think. I'm gonna free text it." (P02)

We print out all our notes ... Because it's so hard to look at ... The way the fields are designed, the GUIs are just so bad that we would just print the notes out. And it's a little bit easier to read ... than to try to negotiate it through on a screen ... my nurse ... my medical assistant would use the printed version ... (P12)

Improve EHR usability & acceptance, specifically for user **interface** - more important than satisfaction, capabilities, response time.