

Additional File 1. Example Quotes of Knowledge Objects

Knowledge Objects		Example Quotes
Confirmation of Existing Knowledge	Billing/Coding, Reimbursement	<p>"Some of my providers are having a hard time getting a level 4. Our coding department says that just because you did spirometry, that does not change your coding... I don't know if they're not documenting enough...in their note." (Jan 2015)</p> <p>"We have the same internal coding department and... if we have questions... even before we submit for billing, we can have them review our note and review the documentation and our level of billing." (Jan 2015)</p>
	Documentation	"We've incorporated... the documentation that you sent out... we've enhanced [it] for our own practice, which I personally like because it's a quick reference tool." (June 2015)
	Patient Satisfaction	"The patients are very satisfied, I can tell you that." (Dec 2014)
	Recruitment	"We used the posters that you provided for us. We have those in the [exam] rooms and out in the waiting area." (Dec 2014)
	Scheduling	"I think in the next quarter we're going try to expand to more providers having those types of days and [asthma] visits in the afternoon, that way it just becomes ingrained in everybody's mind." (Dec 2014)
	Sustainability	"[We] probably will start after the holidays and try to recruit some more for our other providers. X has trained PAs and physicians so we are ready to get them rolling just like she is." (Dec 2014)
	Training	"We did some role playing, trying to get through the list of questions and get comfortable with them. X has been doing our shared medical decision-making appointments and X has sat in with her several times on those appointments trying to famaliarize herself and get a little more comfortable too." (Oct 2015)
	Usefulness of Group Call	"I've been on for a little while and heard some good ideas that I can take back to them." (Dec 2014)
	Usefulness of SDM Clinic	"...I think it's going better and better and I think there is value and the providers are starting to see value in it." (Dec 2014)
Generation of New Knowledge	Application of SDM	"I was very proud or pleased with... [what] we have done in this project to asthma. I think it could be done with diabetes and other conditions." (June 2015)
	Documentation	<p>"I've heard people talking about the [documentation] templates... I actually typed mine up in conjunction with the health documentation information that you sent us maybe a couple months ago. And I added [the] five essential components (of shared decision making) in what you sent me and I've copied and pasted that into smart phrases here, so that whenever I see an asthma patient I can just incorporate that entire document into my charting and delete what I don't need." (Nov 2014)</p>

	Dissemination	"She's working on maybe doing a little series with Fox News... about asthma and what they're doing here at the practice to help patients better deal with asthma." (Dec 2014)
	Health Coach Certification	"Our nurse practitioner is set up for health coaching. She's going to be certified as a health coach within the next couple months... Our clinical coordinator CMA also wanted to get certified in health coaching so maybe that will happen next year." (Oct 2015)
	Patient Education	"We actually had an asthma class for our children, 6-10 (years old), and we had one night, it was an hour and a half class. We had a quite a few people come in with their parents and then we used questions that they had brought up and had a clinical meeting and an asthma refresher." (June 2015)
	PCMH	If any of the groups are doing patient-centered medical home. I just finished doing mine and I actually used the ADAPT-NC [Study]... There was one section on PCMH that asks if we had patient participation with any of our meetings and educational classes and of course we have with the asthma shared decision-making so I was able to use that on my PCMH. That was very nice." (Dec 2014)
	Pre-Visit Planning	"We have been able to have our care coordinators call before and in anticipation of their upcoming asthma visit... and they're asking them beforehand and documenting in... our EHR, how the things are going, what the parents or the patients feel their goals for this year would be, and how their medications are going and... if they're having any difficulties or any adherence issues with their medications... So they're having that conversation out front ahead of your visit so it's there when they come in for their asthma visit." (Aug 2015)
	Productivity	"So [with the parallel scheduling there] may be zero impact on my day if patients were no-showing because we'll just move work-in [patients] into those positions." (Jan 2015)
	Scheduling	"We have [a] parallel schedule where I'll have basically standard afternoon schedule. We only do our asthma clinics in the afternoon... Additionally, if a patient no-shows for the asthma visit, it doesn't affect me. If I have a no-show on my regular schedule, it just may mean I spend more time with my asthma patients. We've found that works very, very well in a productivity model." (Jan 2015)
	Shared Resources	"I'd also like to say a special thank you to X for her presentation for her 2nd year refresher because my first one is next Thursday. I hope she doesn't mind me using and adding my own revisions because it was just a great presentation." (April 2015)
	Recruitment	"I am getting ready to send out a campaign call. Within our... system we can create our own campaigns. Asthma flares this time of year are pretty high so we're sending out a little asthma reminder to folks that we are doing the shared decision-making clinic... It's a group call. Like a reminder call you can do. We can send it out to all our patients or a select group of patients. So I can send it out to all asthma coded patients." (Nov 2015)

Spreading of New Knowledge	Team Based Care	"We have a case manager who will now come in with our meetings that we've identified as [an] asthma meeting and she'll be in there. And then she'll liaison from the family to the office." (Aug 2015)
	Training	"We already have a lot of students that come through and we're teaching them shared decision-making... so that when they go out into the world, hopefully they'll use that." (Oct 2015)
	Application of SDM	"Yes, diabetes and what are some more? Obesity. We're gonna use obesity and diabetes as our first focus." (Oct 2015)
	Health Coach Certification	"I think others might be interested to know about that [health] coaching program... I'd seen some things on the internet about that, but if there's a specific link in case other practices are interested in having some of their staff certified and more formally trained... maybe we can share that with the group?" (Oct 2015)
	PCMH	"We are doing the PCMH recertification and I did see that this could qualify for part of that so I'm sure my managers are on that." (June 2015)
	Pre-Visit Planning	"I love the idea... of having the triage nurses call ahead and do the little pre-screening... We were definitely taking notes about that." (Aug 2015)
	Recruitment	"I'm anxious to see the video that X did. I think that will be a great recruitment video to share with all when it's up and ready." (April 2015)
	Scheduling	"They are looking to, in this fall, start with the parallel scheduling that X has so successfully implemented." (June 2015)

EHR = Electronic Health Record; PCMH = Patient Centered Medical Home; SDM = Shared Decision Making; X = deidentified names