

# Enhancing *the*

## *Mayo conversation aids help patients and clinicians sort through choices ... together*

BY LINDA PICONE

Some look like the kind of flash cards a parent or teacher might use to help children learn basic grade school academics. Others look like simple brochures. Still others are visually inviting websites.

What these roughly 15 conversation tools from the Mayo Clinic's Knowledge, Evaluation and Research Unit (KER) have in common, however, is that they were designed to help clinicians and patients talk through decisions about medical treatment together.

"A particular feature of our work is that we design our tools to be used during the interaction of patient and clinician," says Ian Hargraves, PhD, principal health services analyst with KER. "They're not just for the clinician; they're not just for the patient. They work with them together, which is somewhat unusual."

KER—initially the Knowledge and Encounter Research Unit—was started about 15 years ago by Victor Montori, MD, an endocrinologist and professor of medicine at Mayo Clinic. He began working with a designer, Maggie Breslin, to develop tools and test them. (Breslin is today co-director of The Patient Revolution, an initiative to support patients and communities "as advocates for careful and kind health care" and she continues to work with KER.)

### **Decisions about diabetes medication**

One of the early conversation aids developed by the unit was designed to help with choices of diabetes medication. It's a set of seven cards, each with information on

seven different medications for controlling diabetes. Each card addresses a different aspect of treatment and side effects: monitoring (daily sugar testing), weight change, blood sugar (A1c reduction), low blood sugar (hypoglycemia), daily routine, cost and "considerations," which covers a variety of side effects. These are all highly practical issues that bear on how a patient will live with diabetes treatment and how these medications will affect a person's life.

In conversation, these cards support thinking, talking and feeling through the issues that are most relevant or concerning to the patient, says Hargraves. Typically, considering two or three issues is sufficient to come to a decision, although occasionally all issues cards are reviewed.

So, for example, if the patient is concerned about how often they would have to test blood sugar, they might look at that card first. They would see that insulin and Lirglutide/Exenatide may require twice-daily testing, while some other medications require no monitoring or occasional monitoring. The patient may also be concerned about weight change. That card shows what kind of weight change may occur with each of the medications, from a 3- to 6-pound loss to a gain of more than 6 pounds.

Although cost is something clinicians don't always address—either because they are not sure what the cost of a medication might be or simply because it's uncomfortable—it is a major concern for some patients. The cards help put the issue of cost on the table in a non-threatening way

and allow for tailoring decisions to the practicality of buying a drug. For example, a patient may be willing to put up with a fussier daily routine and some side effects for a less expensive treatment. The cost of the medications to control diabetes may range from \$3 per month to \$370 per month.

Mayo is not unique in developing tools to help clinicians and patients make decisions, but what may set it apart, Hargraves says, is that its tools are developed in the real clinical setting where patients and clinicians are making real decisions. "A lot of these tools are developed in the conference room, so there's a lot of speculation about what people need to know to make good decisions—a lot of which is incorrect," he says.

With the first conversation aid prototypes, for example, each card was for a specific medication, with a list of its various aspects and side effects. It seemed logical. "But then the designers discovered they couldn't be used to make decisions," Hargraves says. "They made a turn from the technicalities of a medication to the reality of a patient's life."

Today's shared tools include those for making choices about anti-coagulants, statins, dealing with a thyroid biopsy that shows there may be cancer, depression medications and even a small, four-page brochure to help a patient and clinician begin a discussion of the patient's life and health care concerns.

### **Measuring efficacy**

"We're a research unit, so all of our tools are part of research," Hargraves says. Although the field is still "wrestling" with what constitutes meaningful measures of efficacy, the three standard measures are increased knowledge, decreased decisional

# discussion

Low Blood Sugar (Hypoglycemia)		Blood Sugar (A1c Reduction)	Cost
<b>Metformin</b> 		<b>Metformin</b> 1 - 2% 	These figures are estimates and are for comparative reference only. Actual out-of-pocket costs vary over time, by pharmacy, insurance plan coverage, preparation and dosage. Under some plans name None Its: \$26 Its: \$26 Its: \$2.50 Its: \$28 Its: \$25 Its: \$30
Daily Routine	Daily Sugar Testing (Monitoring)	Weight Change	
<b>Metformin</b> 	<b>Metformin</b> 	<b>Metformin</b> None 	by dose) Its: \$26 Its: \$26 Its: \$2.50 Its: \$28 Its: \$25 Its: \$30
<b>Insulin</b> 	<b>Insulin</b> 	<b>Insulin</b> 4 to 6 lb. gain 	/ 3 months availability) / 3 months e) / 3 months
<b>Pioglitazone</b> 	<b>Pioglitazone</b> 	<b>Pioglitazone</b> More than 2 to 6 lb. gain 	/ 3 months / 3 months
<b>Liraglutide / Exenatide</b> 	<b>Liraglutide/Exenatide</b> 	<b>Liraglutide/Exenatide</b> 3 to 6 lb. loss 	/ 3 months / 3 months
<b>Sulfonylureas</b> Glipizide, Glimepiride, Glyburide 	<b>Sulfonylureas</b> Glipizide, Glimepiride, Glyburide 	<b>Sulfonylureas</b> Glipizide, Glimepiride, Glyburide 2 to 3 lb. gain 	/ 3 months / 3 months
<b>Gliptins</b> Glipizide, Glimepiride, Glyburide 	<b>Gliptins</b> 	<b>Gliptins</b> None 	/ 3 months / 3 months
<b>SGLT2 Inhibitors</b> 	<b>SGLT2 Inhibitors</b> 	<b>SGLT2 Inhibitors</b> 3 to 4 lb. loss 	/ 3 months / 3 months

These cards were among the first discussion aids developed by KER at Mayo Clinic. A clinician and patient use the cards together to determine what diabetes medication might be best, based on the patient's goals and concerns.

conflict and behavioral measures during the interaction.

Research involves rating videos made of interactions between patients and clinicians with and without the use of the tools. Neutral observers, who have not been involved in the development of the tools, view the videos and score interactions.

So far, Hargraves says, the tools have been shown to be effective at improving conversations and shared decision-making. Currently, Mayo is testing its tool for choosing anti-coagulant medications with 1,000 patients in five health systems: Park Nicollet, Hennepin Healthcare and Mayo in Minnesota and two sites in Alabama and Mississippi.

## Funding

The tools developed by KER are financed largely by internal Mayo Clinic funding, augmented by NIH and other funds. No funding is taken from pharmaceutical companies.

And all of the tools are freely available to clinicians who want to use them. Currently, Hargraves says, the tool on choosing statins, and what kind of statins, is being used by about 120,000 people each year across the globe.

## Clinician-patient interaction

The conversation tools are “relatively content-light” says Hargraves—and that’s intentional. “We want them to enhance the conversation, not replace it,” he says.

“There are experts in the room—the clinicians.”

The reaction of clinicians has been mostly positive, Hargraves says, especially that of primary care clinicians who are working with a variety of patients with different diagnoses and medications. While it might seem at first that working with the conversation aids with a patient could take more time in a packed clinic schedule, Hargraves says it can reduce the time, simply because the aids provide a structure and resources that are useful in everyday clinic conversations. There is no effort to replace conversation between clinician and patient with a tool—the opposite is true. “The key thing about our tools is that we see shared decision-making as something that routinely happens in the course of providing

care; it’s not an add on, it’s the day-to-day work of talking together with patients to figure out what to do,” Hargraves says. “We often say that at the end of the day, we want to help arrive at a decision that makes sense intellectually, practically and emotionally for each person and their situation.” MM

Linda Picone is editor of *Minnesota Medicine*

All of the aids developed by Mayo to support shared decision-making are available—at no cost—to any clinician or other health care provider who wants to use them. The tools are online at <https://shareddecisions.mayoclinic.org>. Some printed versions are also available if requested at [kerunit@mayo.edu](mailto:kerunit@mayo.edu).