

Think Less: A Guide to Simplify User Interfaces

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How many apps do you have on the home screen(s) on your phone? Hopefully it does not look like this.

And yet, after more than 13 years of working in EHR implementations and optimizations, this typically resembles the interface that we provide to users. It's far too complicated for new users to understand intuitively. And even if they are savvy, we don't account for the lost time processing all of the data each time we have to locate it on the screen.

For example, you want to check your e-mail on the phone to the right. Even though you've used the mail app hundreds, if not thousands, of times, you still have to visually process all of the applications to locate the mail app. The more you do it, the faster you get. But why put yourself through this if you don't have to?

That's precisely why most of us don't have a phone that looks like this. And it's precisely why when I perform optimization audits, one of the key themes that arises each time is the complexity of the user workspace.



Clinicians do not require – or desire – three ways to see their schedule. Surgeons only need – and want – one method to enter pre-operative orders. Nurses don't want three places to see a patient's allergies or history.

Staff who float to another department one day per week do not need to account for all of their potential workflows in their home workspace.

But this is typically what we implement. Under the guise of standardization, we limit the personalization afforded to users. For fear of creating too many records to effectively manage, we instead restrict the very staff that depend the software daily.

There are always outliers in healthcare. That's obvious. But many users have highly-repetitive workflows. The registration staff register patients. Emergency room triage staff triage patients based on presenting complaints and acuity. PACU nurses accept patients from surgery, assess them at regular intervals, administer medications, and get the patient ready for a transfer to an inpatient unit to a Phase II recovery area.

Within these workflows, tremendous complexity can arise. But the tools used to monitor and document should be simple and consistent. If the PACU nurse could document the care of a patient on a single tri-fold piece of paper before EHRs, then why do they require 60+ menus/apps/buttons to click on now?

They don't. And it greatly confuses them, which reduces user acceptance and increases the adoption time to return to pre go-live productivity.

While I worked at Epic, we came up with a philosophy to combat UI complexity. We called it 'Think Less' to represent the goal of simplicity for users. We didn't want users to have to think about each action. We wanted it to be intuitive, almost reactive.

Our goal was to give healthcare caregivers the tools they used 80 percent of the time at their fingertips. This means we should provide users with these tools on their home workspace ... and provide each tool only once! For the outlying workflows, those tools should move somewhere else. Think of it as swiping to your secondary screens on your phone to access lesser-used apps.

It's intuitive that we place our most-used apps on our phone's home screen. We need to apply the same logic to EHRs.

- Simplify patient access: Give users a personal or department-based view of patients by default.
- Provide one tool, one time: Make it easy to understand where to access a tool. Giving users multiple places to achieve the same outcome only muddies the waters and delays action.
- Condense action lists: Ensure action lists do not scroll off the screen or require a secondary action to see all options.
- Prioritize tools: Take advantage of 'More' buttons or secondary screens for lesser-used tools.
- Allow user personalization: Most EHR vendors now allow users to personalize their screens in some capacity. This increases autonomy and adoption.
- Customize where necessary: Leverage EHR tools to streamline workflows (i.e. don't give nurses the tools for 'OB/GYN assessments' if the patient is male; don't provide staff with tools for adult patients if it's a pediatric patient.)
- Guide staff where helpful: Apply EHR tools where most applicable (e.g. check documentation for accuracy, recommend best practices, etc.) However, be strategic in their utilization to avoid increased alerts and overuse.
- Understand that not all roles are the same: Account for specializations in your build. You can't give all nurses or all physicians the same template. They may have the same title or license, but their individual roles differ significantly. ICU nurses and pre-admission testing nurses require different tools, as do hospitalists and ED physicians – all to be most effective and efficient.
- Implement the newest features: Take advantage of the opportunity as vendors release new versions, incorporating changing requirements, best practices and customer feedback.

Change is hard, especially the longer you're live on the software and users become accustomed to their workflows. People dislike change. Your most vocal dissenters during the implementation would rather keep your EHR exactly as it is today instead of making changes, even if they offer improvement opportunities.

But as former United States National Security Advisor Colin Powell stated in his *Rules to Lead By*: "Keep looking before surface appearances. Don't shrink from doing so just because you might not like what you find."

Powell continues: "If it ain't broke, don't fix it' is the slogan of the complacent, the arrogant or the scared. It's an excuse for inaction, a call to non-arms. It's a mind-set that assumes (or hopes) that today's realities will continue tomorrow in a tidy, linear and predictable fashion. Pure fantasy. In this sort of culture, you won't find people who pro-actively take steps to solve problems as they emerge."

It takes work to make EHRs intuitive. But the benefits of happier – and more productive – users make it an outcome worth the effort.