VSign is a secure mobile App used by over 2000 clinicians at the MUHC (McGill University Health Center).
VSign allows clinicians easy access to patient lists, labs, vital signs, medications, radiology, messaging and documentation.
Please see http://www.vsign.ca. Once a patient is chosen in VSign, clinicians can then have access to the Kloop communication channel.
(*) In the presentation “Patient”, “patient respondent” and “parent” all denote the “Patient respondent” which can be either the patient himself, one of the parents or any family member that is in charge of the patient
Patient centered design

100 families surveyed prior to project start

Informed by patient needs and local practices

Multi-disciplinary meeting with patient parents for project guidance and clinical acceptability

Funded by the Montreal Children’s Hospital Foundation and Opération Enfant Soleil
Results from an initial survey of 100 patients and family done in late 2015 about what kind of application patient/family would most require and appreciate.
Results from an initial survey done in 2015 about what kind of device and interface patients/families would use

30% of respondents were ready to take time off for face to face meetings and help to make the project a reality, some living at more than 50 km from the MUHC.
KLoop creates a channel of communication between a patient respondent and a group of clinicians. A distinct secured communication thread for every care-unit and every ambulatory clinic.
In a children hospital setting where we first deployed the APP, with patient ranging from newborns to adolescents, the term “patient respondent” can have many meanings and is decided by the clinical team.
Invitation of respondent by clinician is done face to face for secure patient-respondent association

Preserving the consumer experience with mobile devices – having the App available on consumer stores - easy to deploy, easy to install on users mobile devices:


Apple link : https://itunes.apple.com/app/kloop/id1129922208

Also available on BlackBerry World store
Capitalizing on the VSign APP clinical acceptance and deployment – over 1000 MUHC clinicians daily
KLoop is not yet fully deployed nor used extensively. We are now in a testing phase to understand the changes needed to the App.
Kloop was first deployed in October 2016 for inpatients at the Montreal children’s (MCH) part of the MUHC. The Adult hospitals are interested. For adult’s, the patient respondent would probably be the daughter or son.

**KLOOP APP STATUS (Pilot phase Oct. - Nov. 2016)**

- Deployed at the Montreal Children’s Hospital: ER, general inpatient wards, ICU, PICU and NICU
- Tested for usability and feedback with selected patient respondents (pilot phase with 10 patients)
- Ongoing analysis of additional requirements (clinical and patient)
- Better understanding of communication needs and constraints
Empowering the respondent/patient to better understand the illness and course in hospital

Improving the patient experience of care

Being virtually at the hospital for coordination and Q&A

Being able to communicate at the most appropriate time

Counting on someone to answer regardless of shifts and vacations

Capitalizing on modern ways of communication
The “We should talk” campaign aims to encourage speaking up when there is a safety concern, and to develop a collaborative approach when concerns are raised. This campaign targets patients and families and everyone involved in their care. http://www.thechildren.com/patients-families/we-should-talk.
NEW MODELS OF CARE INITIATED BY KLOOP

Emergency ward usage:
Instead of keeping the family waiting for the whole night for lab results and/or consults, the patient is sent home but linked by KLoop. Emergency ward MDs can then contact family and bring the patient back if test / consult warrants it.

Care unit ward usage:
Eliminate physical white boards and allow important information exchange without being on site. Sharing resources with patient’s family and facilitating coordination of meetings.

Intensive care unit ward usage:
Better understanding and preparation for the family’s concerns. Some care processes involving family feedback are expedited.

Adult care unit ward usage (discussion only):
Adult ICU & Internal MED interested in coordination of patient discharge.
The results were obtained from a survey of patients that beta tested the KLOOP App in October 2016.

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>Testimonials</th>
</tr>
</thead>
<tbody>
<tr>
<td>KLoop APP easy to install &amp; use?</td>
<td>100%</td>
<td>“Very easy to install. Took only 1 minute”. “Very user friendly”</td>
</tr>
<tr>
<td>Communication with a group (the medical team) appropiate?</td>
<td>75%</td>
<td>“All doctors were a team and could all answer my questions quickly”</td>
</tr>
<tr>
<td>This initiative is interesting and worth while?</td>
<td>100%</td>
<td>“Very useful tool. It kept me connected to the doctors”</td>
</tr>
<tr>
<td>Interesting for outpatient clinics?</td>
<td>100%</td>
<td>“Definitely. It would add peace of mind in his recovery”</td>
</tr>
</tbody>
</table>

[KLoop] « M’apparaît d’autant plus intéressante pour les parents d’un enfant qui est suivi par l’équipe de pédiatrie mais qui n’est pas hospitalisé (sont à la maison), ou pour un parent (dont l’enfant est hospitalisé) qui ne peut pas être présent de jour à l’hôpital »
The results were obtained from discussions with doctors that used the Kloop module in VSign (Montreal Children’s Hospital Inpatient wards) and from doctors in other wards. Higher user acceptance will necessitate some explaining of what Kloop is and does. Most think of an SMS APP, being notified and disturbed by patient’s family. These results are still preliminary considering that Kloop has only been deployed on a test basis.
Missing requirements (Clinical KLoop module in VSign):
Top level visual notification in VSign (for clinicians)
Labeling a message as answered
Re-invite after discharge
On some wards, Stop the thread when patient is discharged

Missing requirements (Respondent KLoop app):
Message to respondent when the channel is stopped
Web links in messages, cut and paste in messages
A patient centered APP, designed with the patient in mind

A mobile APP that promotes communicating and exchanges with the care team

One of the means to help with patient safety

A valued initiative for patients and clinicians alike

A piece of mind for the family during a difficult period