



Virtual Healthcare

A Provider Guide



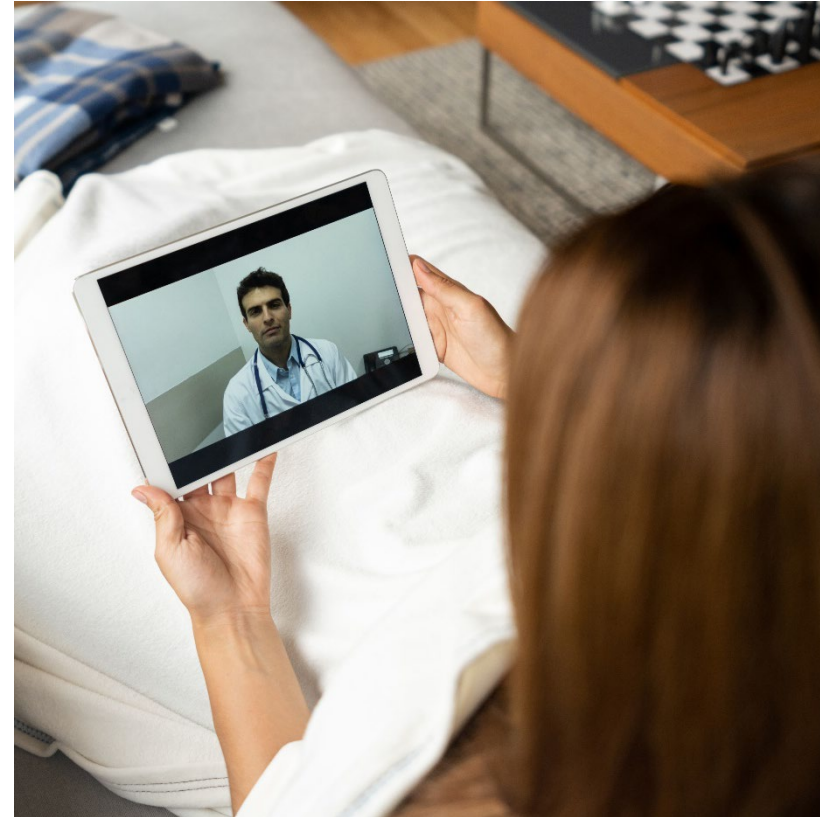
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- Dr. Xenodemetropoulos is currently an Associate Professor in the Division of Gastroenterology, Department of Medicine at McMaster University, and is a consultant gastroenterologist at Hamilton Health Sciences.
- Dr. Xenodemetropoulos has clinical interests transcending the spectrum of luminal gastrointestinal, hepatic and pancreatic diseases.
- He also has academic and clinical interests in health information technology, and has been the Physician Lead in the development of a comprehensive telemedicine program for ambulatory clinics at Hamilton Health Sciences.
- He has established interests within medical education and is involved in a number of leadership and/or administrative roles related to medical education, clinical service delivery and quality improvement.

Objectives

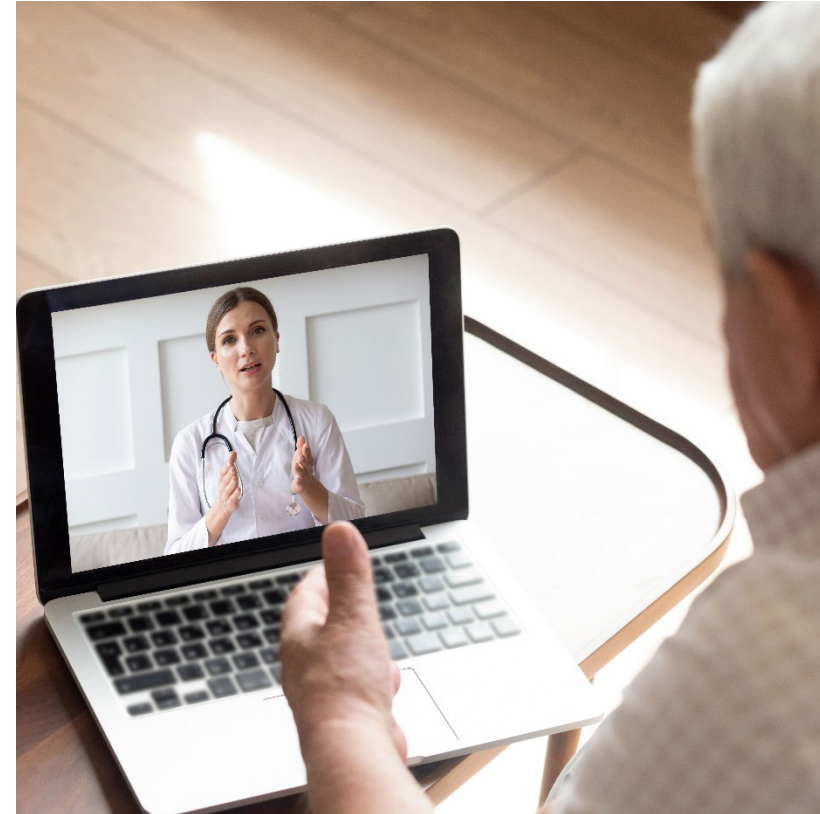
- To define virtual care, and its importance during the COVID-19 pandemic
- Discuss strategies for both patient and health care provider's preparation and optimization of virtual care
- Discuss how LifeLabs can help in supporting virtual care during the COVID-19 pandemic



Virtual Care

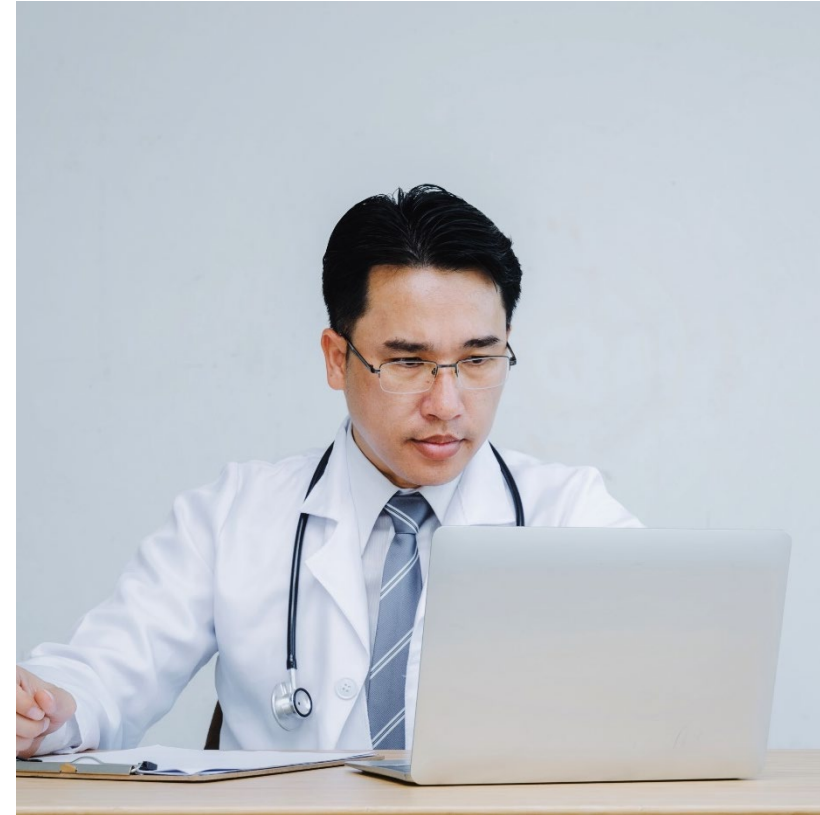
Definition:

- Any interaction between patients and/or members of their circle of health care, occurring remotely, using any forms of communication or information technologies with the aim of facilitating or maximizing the quality and effectiveness of patient care.



Virtual Care

- While these technologies have been around for decades, they had not been adopted into routine use by health care systems around the industrialized world.
- Even prior to the COVID-19 pandemic, interest in care delivery in these technologies had been increasing due to:
 - Ongoing challenge of timely access to health care (e.g. aging populations and a global shortage of health care professionals)
 - Patient demand



Virtual Care and the COVID-19 Pandemic

Why is it important:

- Virtual Care has allowed health care providers to continue to assess and manage their patients with ongoing medical care while maintaining social distancing

How can you participate in virtual care:

Real time appointments (Synchronous mechanisms):

- Telephone
- Video conferencing

Asynchronous mechanisms:

- Electronic Medical Record (EMR) based patient portals
- e-mail communication

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Prior to your appointment:

- Ensure your patients understand that this method of communication is not secure in the same way as a private appointment in an exam room.
- Emphasize the importance of their engaging in their virtual appointment in an appropriate setting (quiet, private area).
- For video conferencing, be sure to use a private computer/device (i.e., not an employer's or third party's computer/device) and a secure internet connection.
- Test video conferencing software and network connection.
- Ensure that you have updated contact information (including preferred telephone number).
- Have a back-up plan established with your patient in the event of a technical failure for a video conference occurs (such as a preferred telephone contact number).
- Remind them to have access to the details of their medical history and an updated list of medications for the appointment.
- Ensure that they have contact information for their preferred pharmacy and LifeLabs location (including telephone and fax numbers)

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Prior to appointment:

- Administrative personnel should inform and prepare the patient for the appointment including:
 - Registration
 - Obtaining and documenting consent
 - Pre-appointment reminder(s)
 - Confirming contact information as well as establishing a back-up plan for an appointment
- Set a brief conceptual agenda for the appointment, including specific goals for the interaction, as well as recognition of time allocation
- Ensure that you have the appropriate equipment: Personal computer with a webcam, speaker and microphone as well as an high quality private internet connection
- Appropriate setting to maximize privacy and avoid interruption
- Video conferencing with appropriate backdrop (solid background and optimal lighting) and positioning (centered with head and shoulders visible on screen)

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During the appointment:

- Confirm patient identity, understanding of consent, goals and limitations of the virtual encounter
- Confirm and document the identity of any attendants to the appointment
- Attempt to focus on the conceptual agenda for the appointment, including specific goals for the interaction, as well as recognition of time allocation
- Systematically use key historical questions and available investigations to strategically assess patients requiring in-person evaluation vs. urgent referral to secondary/tertiary care
- Construct inherent flexibility in timing for engaging in the patient encounter
- Maximize value of EMR, if used as a mechanism of patient documentation and charting
- Attempt to reconnect with patients for whom initial appointments are unsuccessful with back-up plans, or later telephone call attempt (opportunity for minimizing missed appointments due to the inherent nature of virtual care)

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During and following the appointment:

- Remind your patients to have a list of questions to discuss
- Where feasible and safe, discuss how you can collaborate with your patient in the direct involvement of their medical care (e.g. diuretic self-adjustment)
- Make sure that they note any scheduled and future follow-ups, where needed.



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Following the appointment

- Confirm acceptable mechanism for arrangements of investigations and prescriptions for patient (e.g. computer e-Faxing of referrals, requisitions to outpatient laboratory, diagnostic imaging and prescriptions)
- Follow-up arrangements, if applicable
- Documentation of encounter

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Diagnostic Utility of Fecal calprotectin: A Case

- 32 year-old female with no past medical history and on no medications presents with a 4 month history of intermittent lower abdominal pain and 3-5 bowel movements daily (Bristol 5 consistency)
- Reports occasional scant hematochezia with bowel movements
- Denies having any constitutional symptoms, nor systemic manifestations of IBD
- Mother has a history of Ulcerative colitis



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Questions:

- How likely is this patient to have Inflammatory Bowel Disease (IBD)?
- How can I decide whether a referral to Gastroenterology is warranted?
- Does this patient require a colonoscopy?
- What non-invasive testing options exist in evaluation of this patient's symptoms?



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Fecal calprotectin:

- A stool-based, self-collected test that is ordered on the standard MOH requisition. Mention 'Fecal Calprotectin' on the 'Other Tests' section of the requisition
- A calcium-binding protein that accounts for 60% of neutrophil soluble cytoplasmic protein
- Surrogate of intestinal inflammation
- Released into feces when neutrophils gather at the site of gastrointestinal luminal inflammation, with little degradation

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Diagnostic Utility of Fecal calprotectin:

- May help in distinguishing symptoms in non-inflammatory gastrointestinal conditions such as irritable bowel syndrome (IBS) and inflammatory bowel disease (IBD) in adults.
- At a value of $<50 \mu\text{g/g}$, the sensitivity is 83-100% and specificity 51-100%.
- At levels between $50\text{-}150 \mu\text{g/g}$ (“grey zone”), consider evaluating for factors affecting results and retesting.
- Values $>150 \mu\text{g/g}$, organic disease is more likely and referral on for consideration of endoscopic investigation warranted.

Other Causes of Elevated Fecal calprotectin:

Malignancy (e.g. Gastric, colon, etc.)
Infectious gastroenteritis
Diverticular disease
Microscopic colitis
Cystic fibrosis
Autoimmune enteropathy
Nutritional allergy (untreated)
Liver cirrhosis
Aspirin
NSAIDs

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Diagnostic Utility of Fecal calprotectin:

- In primary care (low prevalence of IBD), the emphasis is on ruling out a target disease to provide reassurance, or to continue to monitor your patient for symptomatic evolution.
- In these instances, tests with a **low negative likelihood ratio** are preferred.
- Primary care providers focus on **sensitivity** for IBD and **negative predictive value** to provide a basis for a decision not to refer on for more invasive testing, such as endoscopic investigations.

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How LifeLabs can help:

- LifeLabs locations remain open and ready to serve, with updated hours available online.
- You can email PDF requisitions at ON: PatientReqsON@lifelabs.com and BC: PatientReqsBC@lifelabs.com or, fax them to us at ON: **905-795-9891** or BC: **1-888-674-0370**
- Offering our services right at your patient's home (MyVisit™)
- Offering essential testing for your health care needs
- My Results online secure service that allow patients to access many LifeLabs test results