Ordering investigations after hours

Choosing Wisely Canada interview with Dr Michael Curran

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Rural medicine recommendation 4

Do not call in staff for an investigation (eg, blood test, imaging, operative procedures) during off-service hours unless it is likely to change management.

Recall and describe a clinical encounter in which you were called on to choose wisely

I recently had a dialysis patient present overnight after he had tripped and fallen down the stairs. His foot was extremely bruised and I suspected a fracture. Rather than call the radiology department overnight, I treated his pain, put him in a walking boot, and arranged for an x-ray scan when he was in dialysis the next day.

In your exchange with the patient, how did you raise the need to choose wisely?

Explaining the context: I explain to patients that at our small facility, overnight laboratory or imaging services are available only through an expensive call-back approach. In this case, I shared that my clinical suspicion was that he had a fracture and, even if he did not, given the amount of pain he was experiencing, immobilization would surely help. He was happy to have his x-ray scan the next day.

I also explain to patients that, unless there is unacceptable risk, I will treat them for the worst-case scenario. For example, if we think a patient has a deep-vein thrombosis, we treat them accordingly and arrange for an urgent ultrasound scan during daytime hours. Otherwise, if I call in our one ultrasonographer overnight, they'll be unable to work the next day and other patients in need of imaging will be rescheduled. Patients usually understand this.

Using clinical judgment and evidence-based tools: In cases that are not as clear-cut as the example above, the Ottawa Ankle Rule would help us determine the need for an x-ray scan.[1] However, in our case the pretest probability of a fracture was high, so I explained to the patient that the investigation, while needed, was more of a confirmatory test that could be deferred until the morning.

I often use other validated tools, such as the Wells score[2] or the Canadian CT Head Rule,[3] to help guide the testing I am ordering. However, I judge clinically whether obtaining investigations in the middle of the night is necessary and would change the management of the patient.

Avoiding automatic protocols: In some bigger facilities, automatic protocols help with efficiency. For example, a troponin test may be ordered for every patient who presents with chest pain. However, not every 23-year-old with chest pain needs a troponin test. We use our clinical examination to dictate which investigations need to be ordered. Patient care always comes first, so if we need a troponin level in the middle of the night we get it, but clinical reasoning prevents a lot of unnecessary testing.

What are the key elements of the communication that made it a success?

Understanding your patient: Where I practise, literacy and health literacy rates are quite variable. Some patients will not want to hear overly clinical jargon or learn about pretest probability. Others want the nitty-gritty minutiae about why we are making a clinical decision.

Using point-of-care ultrasound: Visualization can help. Even when I believe a patient may not have a deep-vein thrombosis, some still would prefer an image. With ultrasound I can often show patients what their veins look like and explain how it would look if they were to have a clot.

Addressing fear: Whenever a patient and I are not on the same page, I try to understand their worries. If they believe they need an x-ray scan in the middle of the night, I may learn they had a loved one die of lung cancer and they don't want their own potential health issue to be misdiagnosed. I can then explain that an x-ray scan won't necessarily pick up lung cancer, and we discuss their risk factors. Once I have addressed their fears, we can come together on a management plan.

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References

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3. Stiell IG, Wells GA, Vandemheen K, Clement C, Lesiuk H, Laupacis A, et al. The Canadian CT Head Rule for patients with minor head injury. *Lancet* 2001;357(9266):1391-6.

Can Fam Physician 2022;68:112. DOI: 10.46747/cfp.6802112

Choosing Wisely Canada™

Choosing Wisely Canada is a campaign designed to help clinicians and patients engage in conversations about unnecessary tests, treatments, and procedures and to help physicians and patients make smart and effective choices to ensure high-quality care is provided. To date there have been 13 family medicine recommendations, but many of the recommendations from other specialties are relevant to family medicine. In each installment of the Choosing Wisely Canada series in *Canadian Family Physician*, a family physician is interviewed about the tools and strategies they have used to implement one of the recommendations and to engage in shared decision making with patients. This interview was conducted and written by **Dr Aaron Jattan,** Department of Family Medicine, University of Manitoba, for Choosing Wisely Canada. If you are a primary care provider or trainee and have a Choosing Wisely narrative to potentially share in this series, please contact us at **aaron.jattan@umanitoba.ca**.