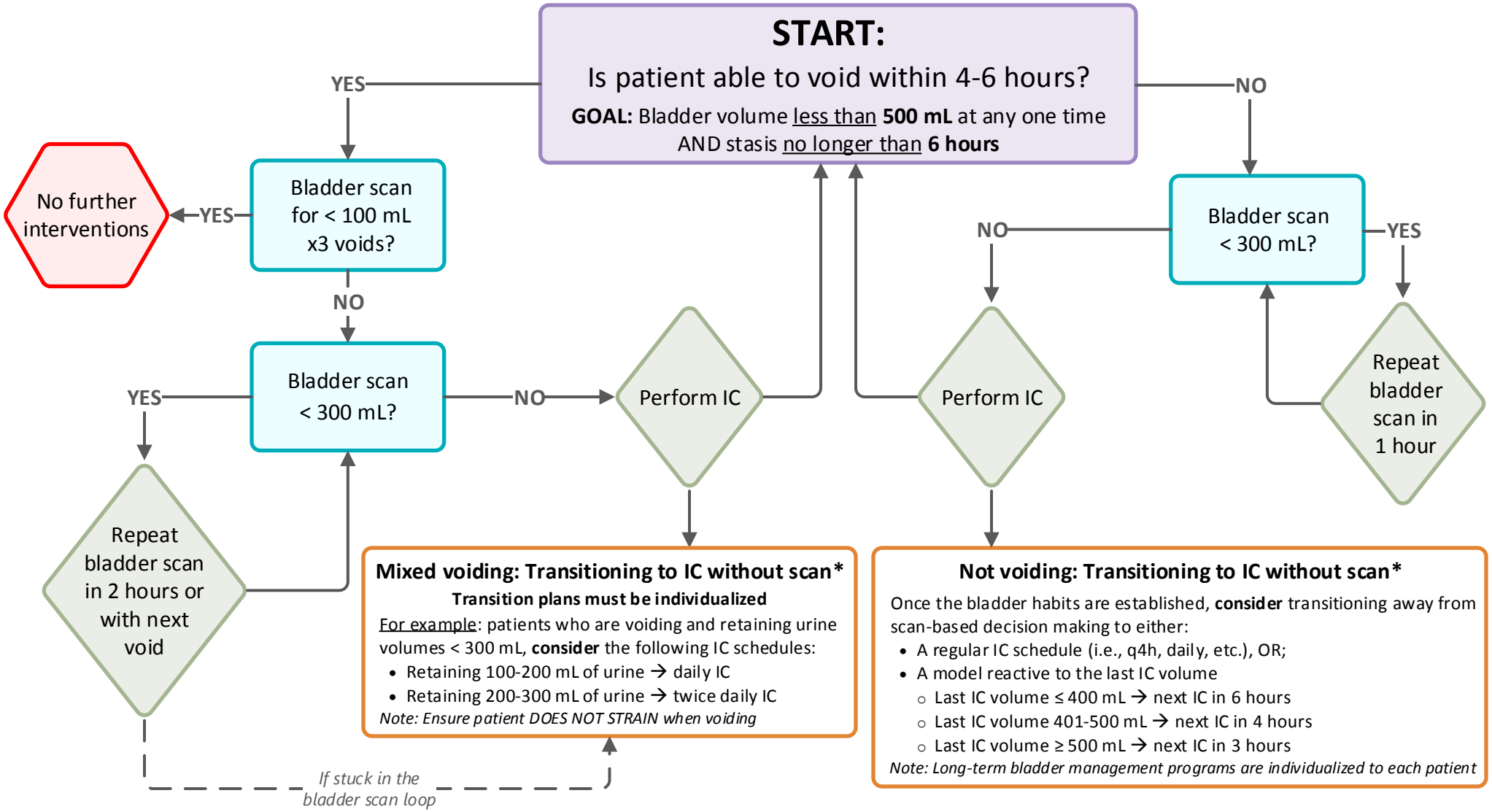
Alberta SCI Bladder Management Pathway, Intermittent Catheter (IC) Loop

(also appropriate for non-SCI with neurogenic bladder)



Mixed voiding: Transitioning to IC without scan*

Transition plans must be individualized

For example: patients who are voiding and retaining urine volumes < 300 mL, **consider** the following IC schedules:

- Retaining 100-200 mL of urine → daily IC
- Retaining 200-300 mL of urine → twice daily IC

Note: Ensure patient DOES NOT STRAIN when voiding

Not voiding: Transitioning to IC without scan*

Once the bladder habits are established, **consider** transitioning away from scan-based decision making to either:

- A regular IC schedule (i.e., q4h, daily, etc.), OR;
- A model reactive to the last IC volume
  - Last IC volume ≤ 400 mL → next IC in 6 hours
  - Last IC volume 401-500 mL → next IC in 4 hours
  - Last IC volume ≥ 500 mL → next IC in 3 hours

Note: Long-term bladder management programs are individualized to each patient

Additional Considerations

** If bladder scans are not available, substitute bladder scan with a true post-void residual via intermittent catheter*

- If incontinent of urine between scheduled IC OR patient experiences problematic urinary retention:
  1. Consider UTI, overactive bladder, or overflow incontinence
  2. Refer to Physiatry
- Consider reinsertion of indwelling urinary catheter if patient's condition changes (i.e., hemodynamic instability)

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START:

Is patient able to void within 4-6 hours?

GOAL: Bladder volume <u>less than</u> **500 mL** at any one time AND stasis <u>no longer than</u> **6 hours**

YES

NO → **SEE OVER →**

Bladder scan for < 100 mL x3 voids?

YES → No further interventions

NO

Bladder scan < 300 mL?

YES → Repeat bladder scan in 2 hours or with next void → Bladder scan < 300 mL?

NO → Perform IC

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If stuck in the bladder scan loop

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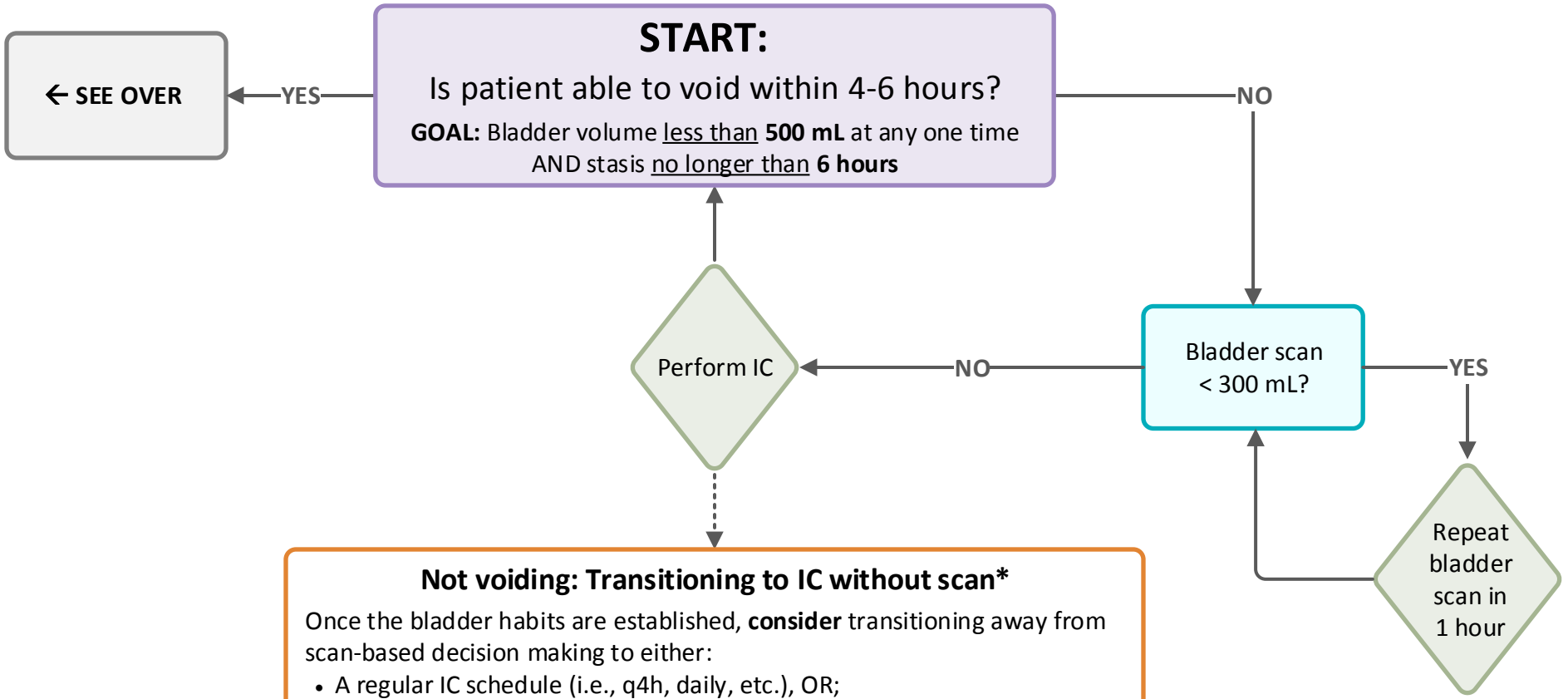

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Important Information

Goal for Bladder Management

Bladder volume less than 500 mL at any one time AND stasis no longer than 6 hours

General Recommendations

- Patients with SCI require long term follow up of neurogenic bladder
- Patients with SCI should be cautioned not to strain harder than they would to have a normal bowel movement when they are trying to void. Excessive straining can lead to damage of the bladder sphincter & problems with ongoing incontinence.
- Consider re-insertion of indwelling urinary catheter if patient's condition changes (i.e., hemodynamic instability)

Physiatry Consults

- For individualization of bladder routine
- Experiencing pain or discomfort with full bladder or bladder emptying (bladder spasms)
- Problematic urinary retention (not due to UTI)
- With any other urinary dysfunction
- Persistent incontinence
- Recurrent infections
- Medication management of neurogenic bladder (anticholinergic, alpha-blocker, beta-3 agonist)

Urology / UDS Consults

- Consult Urology and/or Urodynamics (UDS) during inpatient stay (or as soon as available based on resources) if patient:
  - is unable to achieve continence
  - has a problematic urinary bladder or renal stones
  - is bleeding per urethra
  - is extremely difficult to catheterize
- Consider repeat UDS for patients with bladder change to monitor improvement/safety
- If a patient has had UDS, follow specific Urology/Physiatry recommendations for bladder management

Indwelling Catheter (IDC) vs Intermittent Catheter (IC)

Consider an IDC option if the individual has any of the following criteria that may limit the success of IC:

- Abnormal urethral anatomy (i.e., stricture, false passages, bladder neck obstruction, etc.)
- Bladder capacity < 200 mL
- Poor cognition, poor motivation, inability/unwillingness to adhere to IC schedule
- High fluid intake regimen
- Significant trauma caused by catheter insertion
- Tendency to develop autonomic dysreflexia with bladder filling, despite treatment
- Elevated detrusor pressures
- Severe lower limb spasticity
- Pain with IC not managed with lidocaine jelly
- Persistent, recurrent infections on IC regimen

IC may be more successful for individuals who display the following criteria that enable self-catheterization:

- No abnormal urethral anatomy (i.e., stricture, false passages, bladder neck obstruction, etc.)
- Bladder capacity ≥ 200 mL
- Normal fluid intake regimen
- Ability and willingness to self-perform IC