

Clinical Use of Buprenorphine:

**Induction
Stabilization
Maintenance
Withdrawal**

Buprenorphine Induction

Overview: Goal of induction

To find the dose of buprenorphine at which the patient:

discontinues the use of other opioids,

experiences no cravings,

has no opioid withdrawal symptoms, and

has minimal/no side effects

Buprenorphine Induction

Overview: Practical Issues with Induction

As part of the physician's preparation for office-based buprenorphine treatment, he/she will need to decide whether to keep a supply of medication in the office for induction administration, or to have the patient fill a prescription for the first day's dose and bring the medication to the office where it will be administered.

There are advantages and disadvantages to each approach.

Buprenorphine Induction-Meds in your office

Overview: Practical Issues with Induction **(continued)**

Keeping a supply of buprenorphine tablets in the office means the physician must keep the records required by federal and state law for maintaining supplies of controlled substances for administration or dispensing. Those records may be audited by the DEA.

Buprenorphine Induction-using a pharmacy

Overview: Practical Issues with Induction **(continued)**

Giving the patient a prescription for the first day's doses, and having the patient fill the prescription and bring the tablets back to the office means there would be a delay with the first day's dosing and a risk that a patient might not return with the filled prescription.

Technique of Sublingual Use

Take time to explain the absorption of buprenorphine in the sublingual area

The tablet is bitter (Naloxone), mint prep may help and many patients will consciously or unconsciously swallow their saliva while waiting for the ten minutes

Have the patient try to keep the oral solution of dissolved buprenorphine in the anterior aspect of the mouth for the full ten minutes. It may then be spit out or swallowed. Expectoration may verify use.

Buprenorphine Induction – Day 1

Patients dependent on short-acting opioids

Instruct patients to abstain from any opioid use for 12-24 hours (so they are in mild-moderate withdrawal at time of first buprenorphine dose)

Can use an opioid withdrawal scale (COWS) to assess severity of withdrawal when the patient arrives at the office and to track the patient's response to first day's dose

For withdrawal scales, see Appendix B of CSAT Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction 2004 or WWW.AOAAM.ORG

Buprenorphine Induction – Day 1

Patients dependent on short-acting opioids **(continued)**

If patient is not in opioid withdrawal at time of arrival in office, then assess time of last use and consider either having him/her return another day or wait in the office until evidence of withdrawal is seen

Buprenorphine Induction – Day 1

Patients dependent on short-acting opioids (*continued*)

First dose: 4/1 or 8/2 mg sublingual

**buprenorphine/naloxone (Suboxone) or 4 to 8 mg
of buprenorphine SL (Sebutex)**

Monitor in office for up to 2 hours after first dose

**The length of time the patient is monitored in the
office can vary depending upon the clinician's
familiarity with the patient, and the clinician's
familiarity with using buprenorphine.**

Buprenorphine Induction – Day 1

Patients dependent on short-acting opioids (*continued*)

If opioid withdrawal appears shortly after the first dose, it suggests that the buprenorphine may have precipitated a withdrawal syndrome

Clinical experience suggests the period of greatest severity of buprenorphine-related precipitated withdrawal occurs in the first few hours (1-4) after a dose, with a decreasing (but still present) set of withdrawal symptoms over subsequent hours

Buprenorphine Induction – Day 1

Patients dependent on short-acting opioids (*continued*)

**If a patient has precipitated withdrawal consider:
giving another dose of buprenorphine, attempting to
provide enough agonist effect from buprenorphine to
suppress the withdrawal, or
stopping the induction, provide symptomatic
treatments for the withdrawal symptoms, and have
patient return the next day.**

**Since the latter would risk loss of the patient, the first
option should be considered. Remember the higher the
COWS score prior to treatment, the more successful the
induction.**

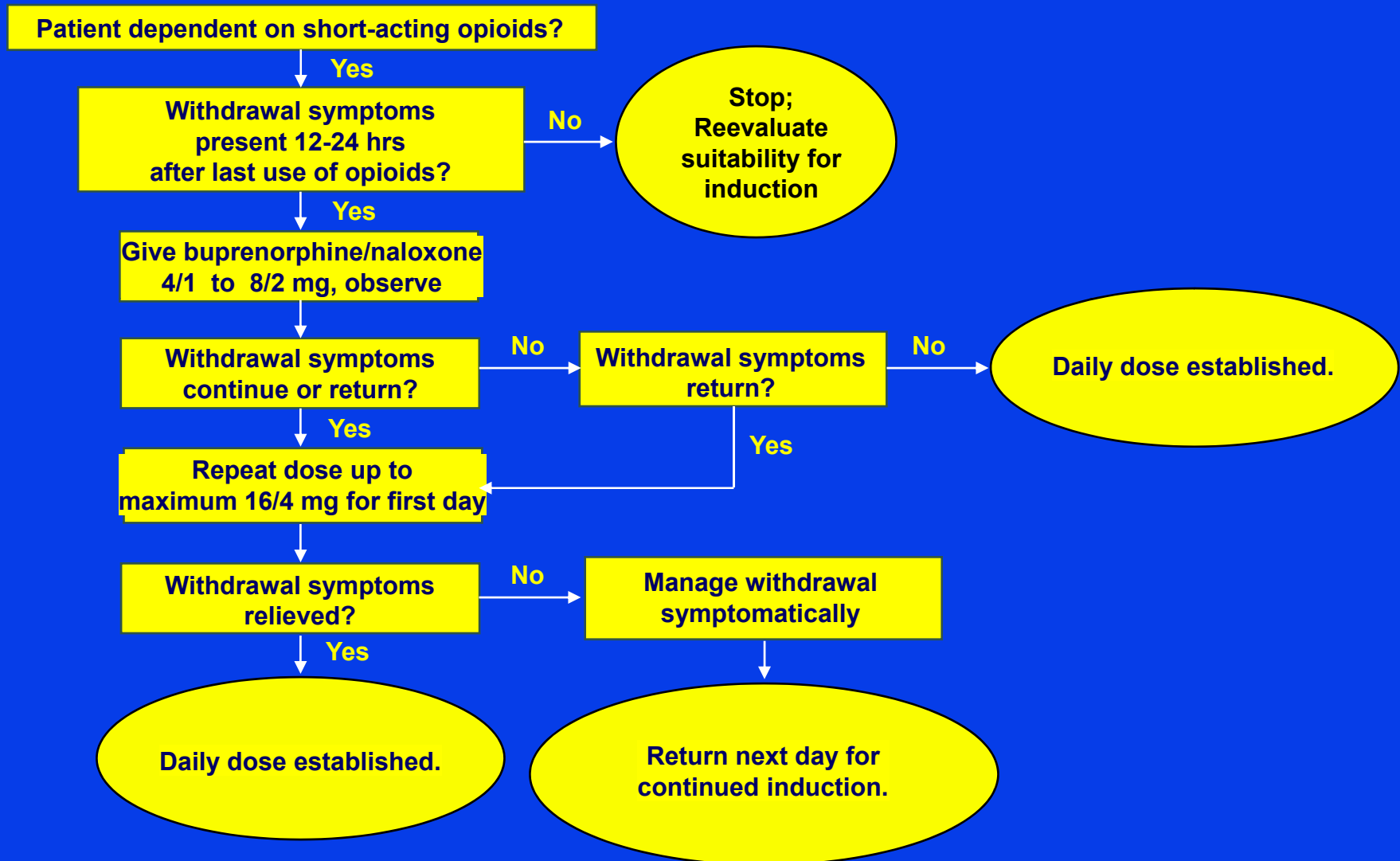
Buprenorphine Induction – Day 1

Patients dependent on short-acting opioids (*continued*)

Can re-dose if needed (every 1-4 hours, if opioid withdrawal subsides then reappears)

Maximum first day dose of 16/4 mg
buprenorphine/naloxone with rare instances
requiring higher doses

Induction: Patient Physically Dependent on Short-acting Opioids, Day 1



Buprenorphine Induction – Day 1

Patients dependent on short-acting opioids (*continued*)

**Can initiate therapy starting with
buprenorphine/naloxone combination tablets**

**If beginning with buprenorphine monotherapy
tablets, then switch to buprenorphine/naloxone
combination tablets after 2-3 days**

**When switching to combination tablets, switch
directly to same dose of buprenorphine (i.e., from
8 mg daily go to 8/2 mg daily)**

Buprenorphine Induction – Day 1

Patients dependent on long-acting opioids

Patients should have dose decreases until they are down to ≤ 40 mg/d of methadone

Begin induction 48 to 96 hours after last dose of methadone, Give no further methadone once buprenorphine induction is started

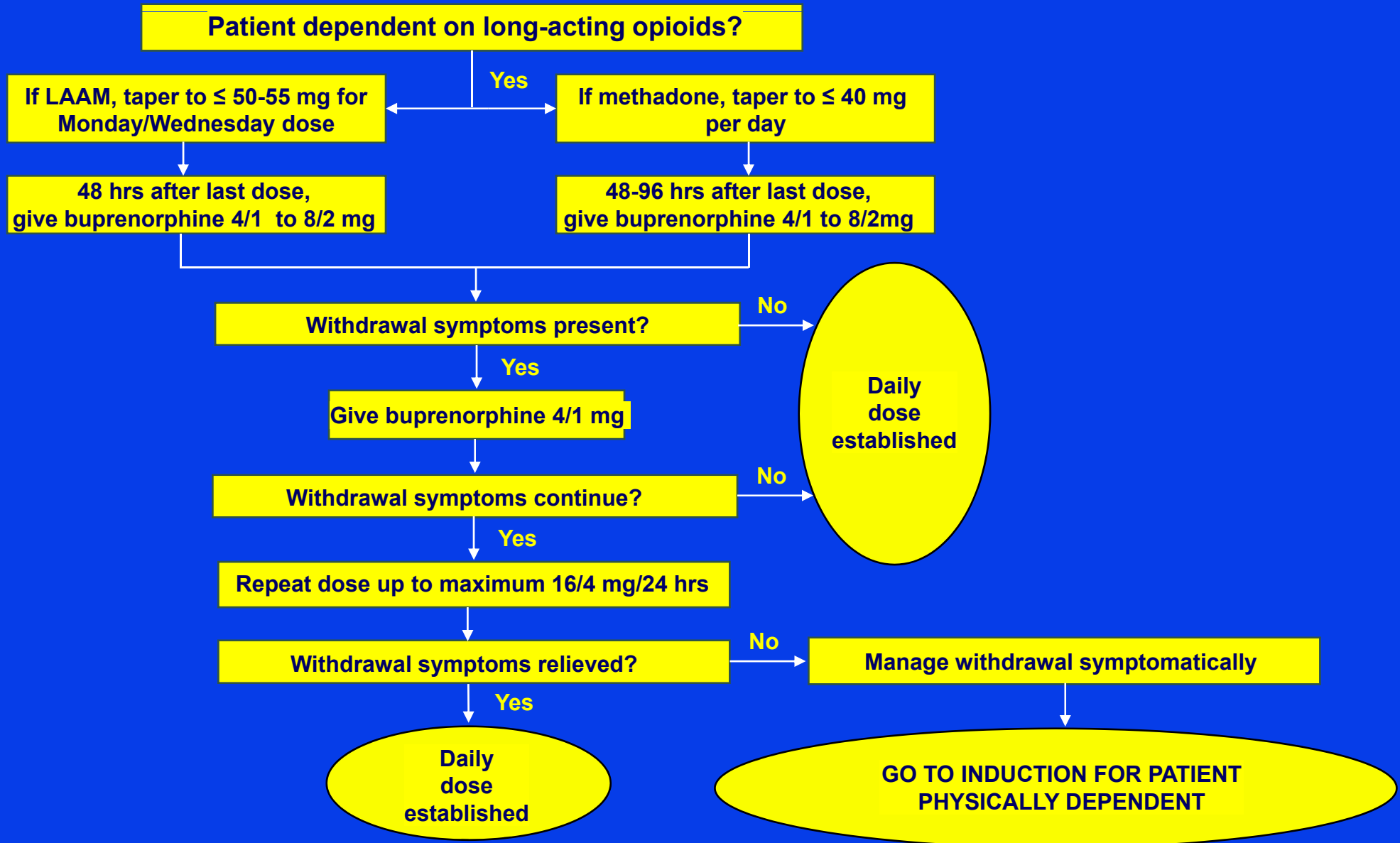
Buprenorphine Induction – Day 1

Patients dependent on long-acting opioids
(continued)

Use similar procedure as that described for short acting opioids

Expect total first day dose of 8/2 mg sublingual buprenorphine/naloxone, but may go higher if needed

Induction: Patient Physically Dependent on Long-acting Opioids, Day 1



Buprenorphine Induction – Day 2+

**Patients dependent on short- or long-acting
opioids**

**After the first day of buprenorphine
induction for patients who are dependent
on either short-acting or long acting
opioids, the procedures are essentially the
same**

Buprenorphine Induction – Day 2

Patients dependent on short- or long-acting opioids (*continued*)

On Day 2, have the patient return to the office or call, if possible, for assessment and Day 2 dosing

Adjust dose according to the patient's experiences on first day

Buprenorphine Induction – Day 2

Patients dependent on short- or long-acting opioids
(continued)

**Adjust dose according to the patient's
experiences:**

**lower dose if patient was over-medicated at end
of Day 1**

**higher dose if there were withdrawal symptoms
after leaving your office and/or if patient used
opioid agonists**

Don't assume abstinence after the first day's dose

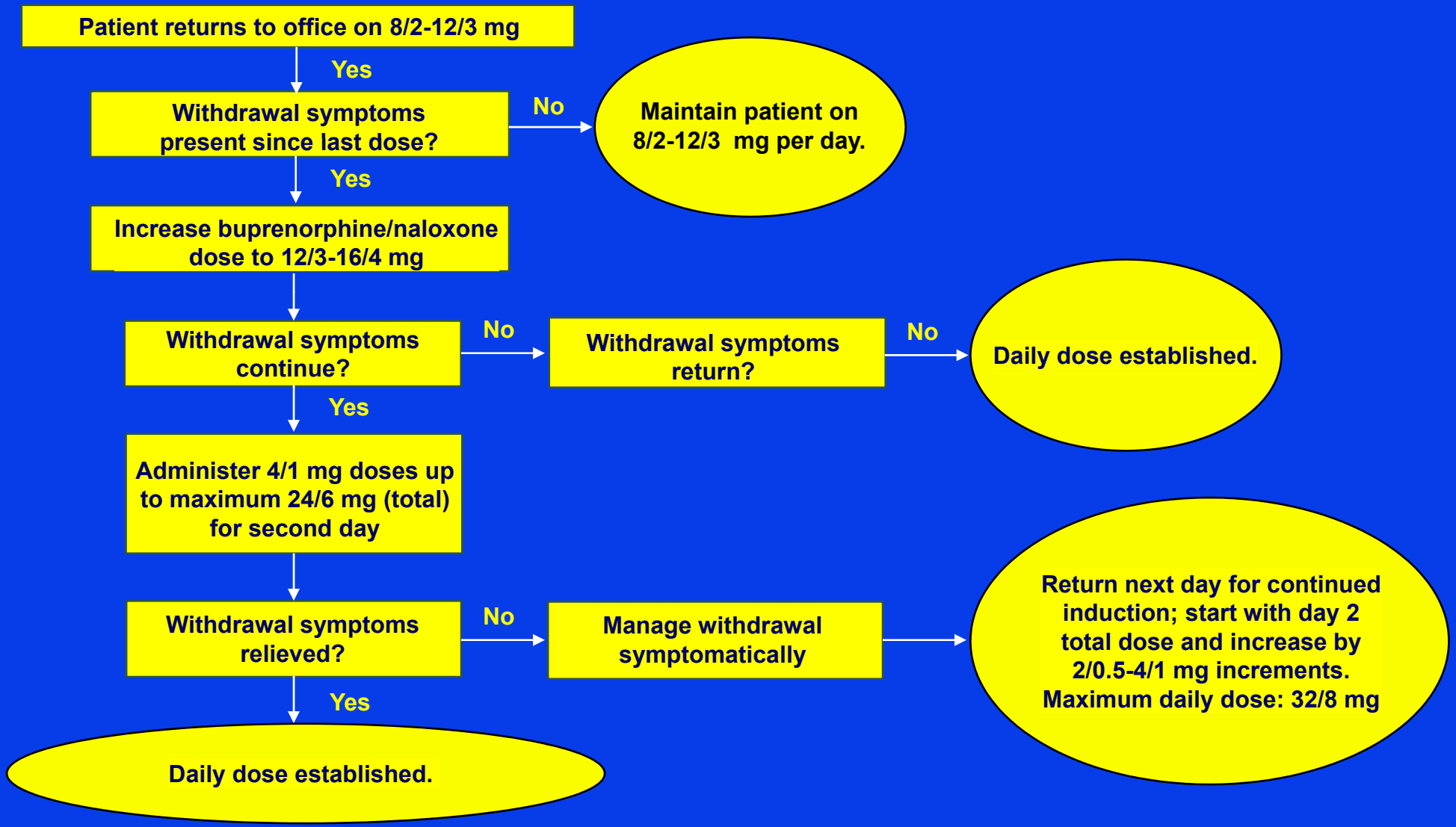
Buprenorphine Induction – Day 2

Patients dependent on short- or long-acting opioids
(continued)

Continue adjusting dose by 2/0.5-8/2 mg increments until an initial target dose of 12/3-24/6 mg is achieved for the second day

If continued dose increases are indicated after the second day, have the patient return for further dose induction (with a maximum daily dose of 32/8 mg)

Induction: Patient Physically Dependent on Short- or Long-acting Opioids, Days 2+



Buprenorphine Induction

Patients not physically dependent on opioids

Examples:

A patient at high risk for relapse to opioid use, such as a person who had been incarcerated and was recently released

A patient whose use of illicit opioids has not reached the level that meets the DSM IV criteria for dependence but meets the criteria for abuse and is at risk for development of dependence

Buprenorphine Induction

Patients not physically dependent on opioids
(continued)

First dose: 2/0.5 mg sublingual
buprenorphine/naloxone

Monitor in office after first dose

The length of time the patient is monitored in the office can vary depending upon the clinician's familiarity with the patient, and the clinician's familiarity with using buprenorphine.

Gradually increase dose over days; increase in increments of 2/0.5 mg

Buprenorphine Induction

Conversion to buprenorphine/naloxone

In virtually all circumstances, induction can (and should) begin with the combination tablet

For pregnant patients for whom buprenorphine is being used, induction and maintenance should be with monotherapy tablets

If induction was begun with monotherapy tablets, switch to combination tablets after 2-3 days

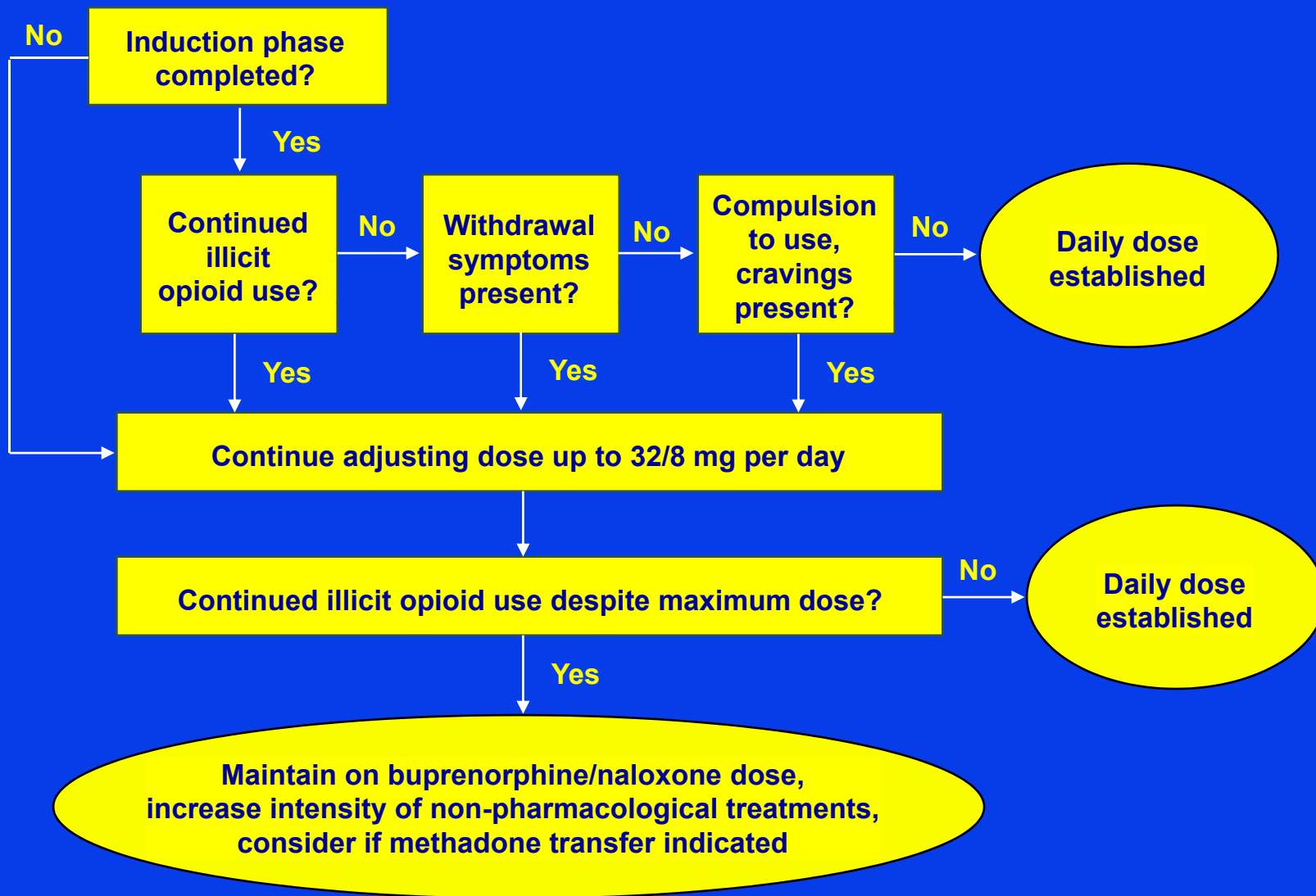
Buprenorphine Stabilization / Maintenance

Stabilize on daily sublingual dose

**Expect average daily dose will be somewhere
between 8/2 and 32/8 mg of
buprenorphine/naloxone**

**Higher daily doses more tolerable if tablets are
taken sequentially rather than all at once**

Stabilization / Maintenance



Buprenorphine Stabilization / Maintenance

The patient should receive a daily dose until stabilized

Once stabilized, the patient can be shifted to alternate day dosing (e.g., every other day, MWF, or every third day, MTh)

Increase dose on dosing day by amount not received on other days (e.g., if on 8 mg/d, switch to 16/16/24 mg MWF)

(note: daily dosing is recommended, alternate day dosing may be useful for those attending treatment programs where medication is administered or for those not wanting to take medication daily)

Withdrawal Using Buprenorphine

WITHDRAWAL IN \leq 3 DAYS (rapid)

Withdrawal over 4 to 30 days (moderate period)

Withdrawal over more than 30 days (long term)

Withdrawal Using Buprenorphine

Withdrawal in \leq 3 days (rapid)

**Reports show buprenorphine suppresses
opioid withdrawal signs and symptoms
(better than clonidine)**

Withdrawal Using Buprenorphine

Withdrawal in ≤ 3 days (continued)

Using sublingual tablets:

First day: 8/2-12/3 mg sl

Second day: 8/2-12/3 mg sl

Third (last) day: 6/1.5 mg sl

Withdrawal Using Buprenorphine

Withdrawal in ≤ 3 days (*continued*)

Buprenorphine is effective in suppressing opioid withdrawal symptoms

Long-term efficacy is not known, and is most likely limited

Studies of other withdrawal modalities have shown that such brief withdrawal periods are unlikely to result in long-term abstinence

Withdrawal Using Buprenorphine

Withdrawal in \leq 3 days (rapid)

**WITHDRAWAL OVER 4 TO 30 DAYS
(MODERATE PERIOD)**

Withdrawal over more than 30 days (long term)

Withdrawal Using Buprenorphine

Withdrawal over 4-30 days

Although there are few studies of buprenorphine for such time periods, buprenorphine has been shown more effective than clonidine over this time period (adults and adolescents)

However, outcomes not as good as for longer periods of buprenorphine withdrawal treatment (longer than 30 days)

Withdrawal Using Buprenorphine

Withdrawal in ≤ 3 days (rapid)

Withdrawal over 4 to 30 days (moderate period)

**WITHDRAWAL OVER MORE THAN 30 DAYS
(LONG TERM)**

Withdrawal Using Buprenorphine

Withdrawal over >30 day (long term)

Not a well studied topic

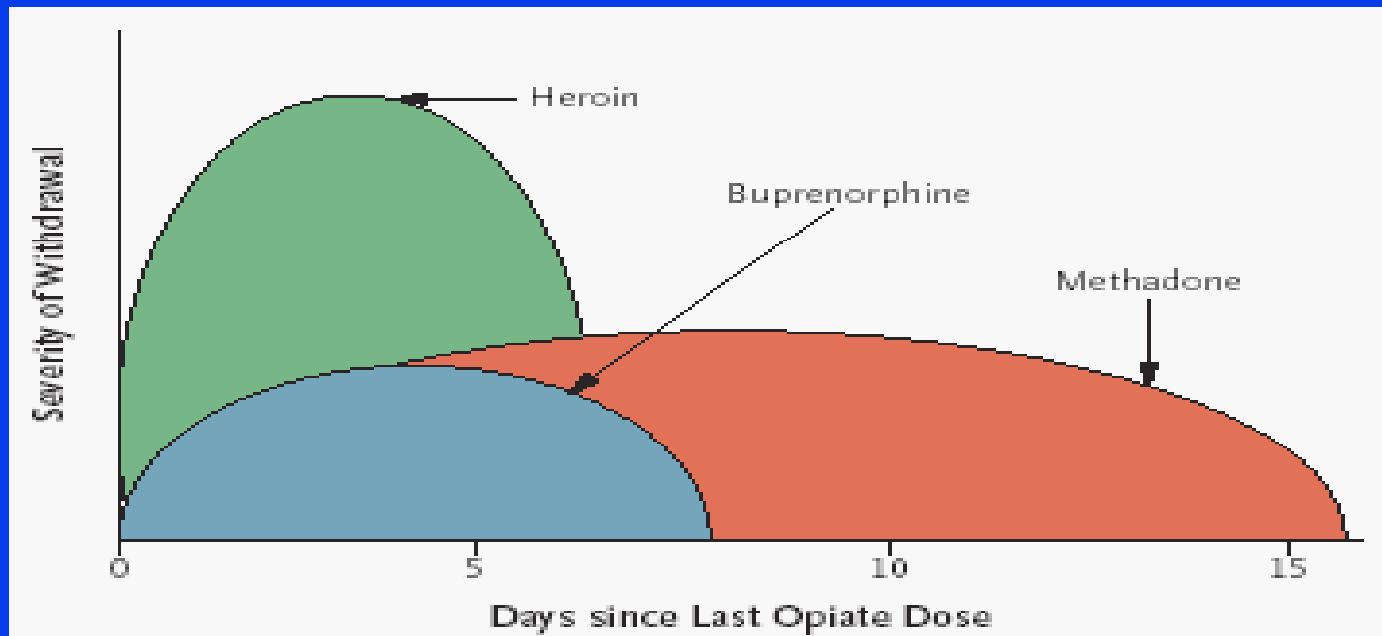
Literature on opioid withdrawal can provide guidance; suggests longer, gradual withdrawal more effective than shorter withdrawal

Tapering schedule: 50% daily to 8 mg; then slower taper depending on clinical judgment

Many iterations of above are effective

Medical withdrawal from buprenorphine associated with much milder withdrawal than for full mu agonists

Comparison of Spontaneous Withdrawals



Blind abrupt discontinuation of buprenorphine 8mg/day

Only minor elevation of withdrawal scale scores

Less intense than heroin withdrawal

Less intense and briefer than methadone withdrawal

Kosten, O'Connor NEJM 2003

Physician Clinical Support System (PCSS)

A national mentoring network for physicians treating opioid dependence with buprenorphine.

To get involved or for assistance, either:

Fill out Registration Form located in the syllabus

Pick up a PCSS brochure at the registration desk

Call: 1-877-630-8812

Email: PCSSproject@asam.org

Go to the website: www.PCSSmentor.org

Your information will be automatically provided to the PCSS. In order to best match you to a mentor please complete the form in its entirety. If you do not wish your information to be provided to the PCSS please indicate this on the Participant Registration form in your syllabus.

Summary

Buprenorphine is effective and safe when used for maintenance treatment of opioid dependence

Monitor patient during induction with buprenorphine; best to keep patient at office after first dose to gauge effectiveness

Efficacy of buprenorphine in management of withdrawal not well determined, but withdrawal from buprenorphine may be milder than withdrawal from other opioids; probably best if conducted over longer periods