Integrating Assessment INTO INTAKE

ASSESSING A CLIENT DURING INTAKE IS IMPORTANT. HERE ARE SOME IDEAS TO HELP YOU MAKE THAT HAPPEN IN THE TIME YOU HAVE. BY JULIE GOODWIN, LMT

Imagine this scenario in your practice: Your client is a smallish woman in her 60s who has no chronic health conditions, takes no medications and exercises daily. She has a structural short leg that creates compensatory scoliosis, lengthening the lumbar erector spinae muscles on the short-leg side and “jamming” the lumbar erectors and elevating her pelvis on the long-leg side.

An expected compensation is chronic eversion of the foot on the short leg, which bears almost all the body’s weight during standing posture as the longer leg remains slightly flexed at the hip and knee in order to square the pelvis. Another unexpected compensation is elevation of the shoulder on the long-leg side, forcing the head to tilt slightly toward that shoulder in order to maintain equilibrium in standing posture. This same shoulder is rounded and depressed toward the anterior, tilting the inferior angle of the scapula noticeably away from the rib cage.
The client’s gait is marked by a heavier heel strike by the short-leg foot as it hits the ground from a greater distance, while the long-leg foot often brushes the ground in the swing phase, causing her to stumble slightly. She experiences ongoing, low-level pain in her back and shoulder, neck and jaw, hip, knee and foot.

This client would benefit from assessment of her musculoskeletal structures and functions, as well as an ongoing treatment plan that addresses her pain and compensation patterns.

How do I know this? I am that client, and these assessments and that plan have never been offered to me.

As a longtime massage school instructor, I know students learn and are tested in a wide range of assessment techniques. In response to a variety of factors, however—our perception of client expectations, employer policies that mean the client must be on the table for the full duration of the purchased session and that turnover between clients is severely limited, or simply the falling-away of assessment skills that don’t seem to be valued in the work setting—performing assessments during intake seems to be in danger of becoming a lost art.

Conducting an in-depth interview, posture or gait analysis, range of motion or muscle testing, and palpations in the time available in some work settings can seem daunting. You can accomplish these tasks, however, by committing to developing efficient assessment skills, identifying which assessments provide the most treatment planning data for an individual client, combining functional assessments and utilizing results in a methodical manner to create an individual treatment plan.

**WHY ASSESSMENT MATTERS**

Thorough client assessment is essential for reasons that benefit both client and massage therapist:

**Assessment ensures client safety.** Simply reading health history form information can fail to reveal potential dangers and cautions or contraindications to touch, modality, or technique that assessments can reveal. Reporting muscle pain and joint stiffness, for example, is common—as is taking a cholesterol-lowering statin drug. Asking specific interview questions to assess the type and degree of pain and stiffness, testing muscle strength and joint range of motion and palpating involved structures can reveal objective findings that do not support the subjective reports.

Because muscle pain and joint stiffness can indicate a serious side effect of a cholesterol-lowering statin drug, deferring massage and referring this client for medical evaluation by the prescribing physician may prove critical. Failing to link reported symptoms with other health history form information (including known allergies to product ingredients), or to follow up with necessary assessments doesn’t protect the client from potential harm.

**Assessment represents ethical practice.** Informed consent is essential to ethical practice. Truly informed consent is created when you utilize the plethora of information available from assessment: the client’s general health status, the type, degree and location of pain, side effects of medications and medical treatments, and observation and testing of musculoskeletal structures.

The lack of such complete information can result in providing “cookie-cutter” treatments wherein the same acceptable but ultimately ineffective techniques are applied to every client. For treatment planning decisions to be client-centered, they must be based in assessment of the unique attributes of each client on the day of treatment.

**Assessment encourages client education and retention.**

Think about the last time you had your car serviced. Did the mechanic ask you which type of tool he should use? If not, then why do we massage therapists defer to client expectations that arise from a lack of information? It is the trained professional’s responsibility to offer information that educates and provides better service for the client.

Treatment planning includes discussing and setting short-term and long-term goals in partnership with the client. Establishing such a partnership, even if it lasts for only a single appointment, requires that you inspire trust and communicate empathy. Think about assessment this way: A client is inspired to trust when you can demonstrate your knowledge of the body and your willingness to share it, your skilled touch as you perform functional assessments, and your commitment to taking treatment beyond the massage room through client education. You communicate empathy as you listen intently to what your client tells you, as you discuss treatment options, and as you and the client create an individual treatment plan that acknowledges the client’s wishes, abilities and preferences.

An accepted marketing axiom is that retaining a client is far more cost-effective for a business owner than finding a new one. A client who feels ownership of an ongoing treatment plan has an investment in remaining your client. By instituting policies that support time for client assessment, a massage practice announces to clients and to staff that the standard of service is client-centered treatment, not assembly line production.
An important component for setting treatment goals is agreeing on the starting points. You might notice that range-of-motion assessment has shown that abduction at the right shoulder becomes painful beyond 45 degrees, for example, or that the client’s back pain kicks in when she bends her trunk toward the left.

Once the starting point has been established, goals can be accurately measured to gauge treatment progress: the range of abduction increases or the stretches you demonstrated decrease back pain during lateral flexion. Enlisting the client in assessing treatment progress contributes to retention, as the client experiences the value of your work and shares in the sense of accomplishment.

Assessment contributes to skills enhancement and professional growth. Skills bloom when they are used. By committing to reawakening your assessment skills, you are making a statement about your professional standards that can enhance every aspect of your practice.

After more than 25 years as a massage therapist, the continuing excitement in my work with clients comes from learning something new each time I give a bodywork treatment. My personal body of knowledge is enlarged each time I apply my visual, communication, and tactile skills in the assessment and treatment process. Client by client, I gain more experience that my hands can recall and draw on for each subsequent treatment session.

INTEGRATING ASSESSMENT INTO INTAKE

When does treatment begin? After the client has climbed onto the table or at the very first moment of encounter? In client-centered treatment planning, a session begins at the very first moment, because assessment is treatment. When assessment is acknowledged as a vital component of treatment, everyone reaps substantial benefits: the client is introduced to your knowledge of the body and experiences your skilled touch even before disrobing, which promotes confidence and trust and enlists participation in the treatment plan. An assessment-based treatment plan also ensures maximum effectiveness and amount of time on the table for the client in subsequent appointments, and the massage therapist can maximize client service, flow and retention.

DEFINING INTAKE GOALS & STRATEGIES

Keeping intake session goals uppermost in your mind helps you to accomplish them with greater ease and efficiency.

Goal No. 1: Gain the client’s trust: A client’s trust fosters the openness necessary for effective treatment planning. From the first moment of contact, you can inspire trust. As you greet your client and form your initial visual impressions, be truly present and engaged: maintain eye contact, ask the client’s name preference and use it, listen with intention, display confidence in your skills and be willing to share your knowledge.

Goal No. 2: Identify areas for investigation and assessment: A client’s health history form can be quickly mined for useful information, or it can be a stumbling block to efficient assessment. Listing health conditions alphabetically on the health history form or by the physiological system of origin, for example, has little advantage for identifying assessments or for defining therapeutic intentions.

A health condition or injury that is primarily characterized by inflammation, for example, has similar impact on modality and technique choices regardless of whether it is connected to the immune system or to a musculoskeletal structure. If it is within your control, design or suggest the use of a form that facilitates the best use of intake time, with health conditions categorized according to their effects on the client.

Of course, the myriad of health conditions will never all fit neatly into defined categories, but reconsidering their placement on the health history form can more easily identify needed assessments.

If you are unable to institute changes in your facility’s intake form, work with a colleague to practice making the best use of health history information on the form you use. After completing a sample intake form as a client with Parkinson disease, a sprained ankle, fibromyalgia or another condition, identify the following treatment planning factors:

- Cautions and contraindications
- Therapeutic intentions
- Client comfort measures

How easily can the necessary information be located on the current form? What can you do within the limits of the existing form—circle relevant terms, mark them with a highlighter or an asterisk—to quickly highlight relevant content, form follow-up questions and document the client’s responses?

Goal No. 3: Assess structures and functions to determine therapeutic intentions and comfort measures: Although performing a range of potentially complex tasks in a 10-minute time frame can sound impossible, combining assessments makes the process effective and efficient:
• Assess health status, pain and inflammation, and medication and medical treatment side effects by linking health history information. What are the overall and specific effects of a condition, and what are its treatments and possible effects?

• Combine assessment of posture and gait with range of motion and muscle strength, followed by palpation of relevant structures.

Depending on your practice setting and the client’s wishes, you may be able to negotiate additional assessment time by extending the session duration or by gaining the client’s agreement that the results of assessment is as important to treatment success as time on the table.

Goal No. 4: Negotiate a plan for treatment. Enlist the client in drafting an initial treatment plan that arises from assessment results. The plan may comprise a simple sentence, such as “If you agree, I recommend that we keep you face up on the table and elevate your left leg, and use lighter massage on that leg,” or it can be more complex, with plans for multiple sessions, a description of various modalities and techniques, and strategies for evaluating treatment progress.

Summarize your findings in lay terms that the client can understand. Using health care-specific terminology that is unfamiliar to a client creates a barrier to communication and fails to foster the desired partnership. “Flex,” for example, has a different meaning to people outside the massage therapy profession. Educating clients is important, but not at the cost of shared understanding.

APPLYING YOUR SKILLS
Successfully integrating assessment into the limited time for intake requires that you apply efficient assessment skills as you greet the client and move about the treatment space.

Observe with intention. We all think we have great observation skills. As you read this article, close your eyes and describe in detail the clothing and shoes of another person in the room, or of the person who was last in the room with you. How well did that go? We often look without truly seeing. Practice honing acute observation skills:

• Spend time in a setting where you can compare the attributes among a wide range of people, such as a park or shopping mall. Place yourself to observe posture and gait from various distances and angles—anterior, lateral and posterior—yet near enough to gauge broad signs of health status, such as skin pallor or flushing, and easy or labored breathing.

• Commit to assessing and characterizing the signs of general health status, posture and gait of 20 people in each setting. Make notes of your findings to track the development of your observation skills.

Guide the interview. A major challenge of pre-massage assessment is finding the balance between creating space for the client to confide vital information and moving through the interview within the demands of available time. Several strategies can help you meet this challenge:

• Encourage focused thinking. Instead of asking “What does your pain feel like?” think about saying, “Tell me what two words characterize your pain.” Instead of asking “What makes this condition better?” say “Tell me what one thing you do that improves how you feel.” Depending on the client’s communication style, you just may elicit the most important information by asking for one or two focused responses.

• Allow unhurried space for the client to respond. This may seem counterintuitive when you are trying to move through the interview at the necessary pace. When a client feels hurried, however, her stress level rises and forming a verbal response becomes more difficult and effective communication is shut down. Occasionally, of course, a client needs to use the interview time to share news or vent feelings, and accommodating this need is part of building a relationship of trust and empathy.

• Listen as if your job depends on it. Because it does. Whether you are employed or in private practice, the client re-hires you each time she books a subsequent appointment—or fires you when she doesn’t.

• Summarize the client’s words to ensure clarity. Misunderstanding results in ineffective treatment. When a client feels truly understood—can see it in your body language and experience it in your follow-up questions and summary—she feels valued and respected, and committed to treatment.

Prioritize assessments. When negotiating for more assessment time is unlikely, make choices that prioritize client safety and support the best care for the individual client’s needs:
• First: assess general health status, pain and inflammation, and medical treatment or medication side effects to ensure that massage is appropriate for the client, and to identify cautions and contraindications to modalities or techniques.

• Next: perform functional assessments—posture and gait, range-of-motion and muscle strength—and palpation in order to identify compensations and patterns of strain, as well as to pinpoint requirements for positioning, bolstering and mobility assistance.

Acknowledge the client’s overriding needs. For a variety of reasons, the assessments we choose for one client may be inappropriate for another client who has the same condition. A client who is in acute pain, for example, may need to lie down on the table far more than she needs to endure a posture analysis. A client with limited vision, hearing, mobility or cognition may be unable to easily participate in certain assessment procedures—or a client may simply not want to be assessed.

Honor the client’s wishes regarding assessments and other treatment, unless they are contraindicated by other factors, and ensure client comfort during assessment. Defer any assessment that requires more active participation than the client desires or is able to perform without strain.

Assess structures and functions. Functional assessments—posture or gait analysis, range of motion or muscle strength testing—are indicated by the results of your visual observations and by the client’s health history information and interview responses. If you have time to perform only one functional assessment, select the one that will provide the most information about the client’s primary reason for their current appointment, or that follows up on your most notable initial observation. Briefly explain why you have selected a specific functional assessment, and verify the client’s willing participation.

Offer your findings as you observe them, and verify the client’s perception of their accuracy.

Palpate relevant structures. Skillful palpation introduces the client to your touch, offers assurance that she is in safe, skilled hands, and can easily be combined with other functional assessments. Request permission to palpate: touch of a standing, clothed client during assessment differs from touch of a disrobed client on the massage table. For some people, palpation can be more powerful and intimate than massage.

Document assessment findings. Assessment is a powerful treatment planning tool when results are well-documented. When documenting assessment results, validate that your findings are verified by the client. You may note dysfunctional gait in a client whose new shoes were creating a blister that day.

An accurate starting point is imperative to your ability to gauge subsequent assessment results. Ensure that assessment terminology is consistent among the treatment staff. “Acute” or “systemic” should carry the same meaning to anyone viewing the client’s file.

PERFORMING ASSESSMENTS IN A 10-MINUTE INTAKE SESSION
In settings where time for intake and assessment is restricted, these may be the only assessments you can realistically perform. In any massage therapy setting, client safety is paramount. Assessing a client’s general health status, pain and inflammation, and medication medical treatment side effects ensures that massage is appropriate and identifies cautions and contraindications.

Such assessments protect the client, the massage therapist and the practice, and must be part of any intake session whether the client is new or returning, regardless of the amount of time routinely allocated for intake. Have the client intake form available, as well as any existing case records, paper and pen during the pre-massage interview and assessments. Don’t rely on recalling the details that will be needed to formulate the treatment plan. At the conclusion of each assessment, characterize your findings for the client and use them to identify the next step.

Health status. Certain indications of health or frailty are evident even before scanning a client’s health history form. Does the client appear to be hale or frail? Does this person look like someone who should be getting a massage today? A client whose face is red, whose breathing is labored, whose eyes are “filmy,” who is perspiring in a cool room, who can’t seem to focus on tasks at hand or seems less than present,
for example, may not be a candidate for massage with circulatory intent or a modality including skin-to-skin touch, and may need to defer massage altogether. Signs of a reasonably healthy client include:

- Fair skin is free of pallor, redness or jaundice
- Observable skin is free of rash or open lesions
- Breathing is unlabored
- Eyes are clear, with no evidence of fever or malaise
- Response to ambient temperature is as expected (the client is neither perspiring or chilled)
- Response to simple requests is as expected (in the absence of evident limitations to vision, hearing, mobility or cognition); the client understands directions, follows where you lead, is oriented to time and place.

Following your initial assessment, scan the health history form for conditions that indicate more thorough assessment of the client’s health status.

Assessing general health status. Observe and characterize the client’s skin, eyes and demeanor, paying close attention to skin temperature when you shake the client’s hand, for example. Then, characterize the client’s demeanor and orientation. Finally, investigate the effects of any recent or current health conditions on the day of the massage therapy session.

Alert the client to the need for more in-depth assessment by briefly explaining your ethical requirement to provide safe touch. Formulate one or two follow-up questions that will help you to define the clear cautions and contraindications, appropriate therapeutic intentions, as well as comfort measures to ensure the best massage experience for this client.

It is not unusual for a massage therapist to observe signs and symptoms that may conceivably indicate a health condition for which a client has not sought medical diagnosis or treatment. Although it is outside the accepted scope of practice for a massage therapist to diagnose or suggest the existence of a specific health condition, it is imperative that client safety be ensured.

Certain signs and symptoms indicate referral to a medical practitioner for evaluation, diagnosis and, when possible, clearance to receive touch or massage with circulatory intent before massage can be safely given or continued. Such signs and symptoms include:

- Visible bleeding or symptoms of internal bleeding or shock.
- Acute pain, persistent or body-wide inflammation, or warning signs of cancer.
- Signs or symptoms of infectious disease.
- Whenever your objective findings do not support a client’s subjective report of ongoing or progressive signs and symptoms.

Clearly and firmly state your reasons for requiring evaluation and your conditions for continuing massage treatment by saying, for example: “Ted, your acute abdominal pain and tenderness prevent me from giving you a massage today. My responsibility is to ensure your safety in my care. Massage may not be safe for you until your medical practitioner has diagnosed and treated the cause of these symptoms. I look forward to scheduling a massage for you after that has taken place.”

Pain and inflammation. Pain is a complex condition—acute or chronic, somatic or visceral, local, systemic, or referred, consistent or progressing. Pain can have a clear cause, or arise for no known reason. A client’s pain may have multiple characteristics: it can be usually chronic but occasionally acute, sometimes local, other times body-wide. Or, their pain may usually remain at a consistent level, but perhaps progressing in the past week. Pain can arise for no known cause and dissipate for unknown reasons.

When a client reports pain, its qualities must be thoroughly assessed:

*Position and location:* Which positions relieve or exacerbate the pain? Is the pain superficial or deep? Pain described as lying deeper in the body may be visceral rather than somatic. Visceral pain may be referred to the body surface in a predictable pattern, as shown in Figure 1.

Deep pain that refers or travels from the site of origin may indicate active trigger points or nerve impingement, among other causes. Is the pain local or body-wide? Undiagnosed body-wide pain, even when unaccompanied by other symptoms, indicates that the client should undergo medical evaluation and diagnosis before receiving massage.

*Duration and progression:* Chronic pain is usually defined as lasting six months or more. Acute pain usually persists no more than two to four days following its inception (although chronic pain may include periods of acute pain). Acute pain is often described by the client as “sharp,” “breathtaking” or “intense,” and chronic pain as “deep,” “throbbing,” “aching” or “burning.” Has the pain become more or less intense in the past 48 hours? Progressive pain indicates medical evaluation and diagnosis before massage is safe.

Pain can also be the result of pressure on tissues caused by inflammation. Evaluate the site of localized pain for signs of local inflammation. Is the pain accompanied by tenderness, swelling, local heat or redness?
Assessing pain and inflammation. Ask the client to choose one or two words to characterize each factor—duration, location and progression of pain, and to rank their level of pain at this time on a numbered scale, with “1” being faint discomfort and “10” representing excruciating pain.

Then, designate the client’s pain as acute or chronic, somatic or visceral, local, body-wide, or referred, consistent or progressing, and note your observation of signs of local or body-wide inflammation.

Be sure to acknowledge accepted indications, contraindications and cautions. Acute pain and body-wide inflammation, for example, are systemic contraindications to massage. When progressing or undiagnosed body-wide pain is present, defer massage and refer the client for medical evaluation and diagnosis. For local inflammation, keep touch a hand-width away and avoid gliding strokes distal to the area.

Remember, too, that you’re going to have to adjust pressure and consider shortening the session to avoid fatiguing a client with chronic pain. Consider using a modality that places no demands on the client for active participation.

Medication and medical treatment side effects. Assessing medication side effects can be the most challenging segment of intake. Complicating factors include non-compliance with medication dosage, self-medication, interaction with other drugs or with foods or even sunlight, and uncommon adverse reactions. It is important that you locate a resource for rapid, up-to-date medication and medical treatment information to consult whenever you encounter an unfamiliar medication name, side effect or medical treatment that may impact massage treatment planning. If a client who has been prescribed a medication to treat hypertension fails to take it properly or at all, for example, massage with circulatory intent may be unsafe.

A client with multiple or chronic health conditions, or who is in treatment for cancer, is likely to be taking a range of medications whose interaction may intensify certain side effects. Dosages and responses can vary from person to person, and from day to day. Assessing medication side effects should be performed before each massage. In general terms, medication side effects fall into several broad categories:

**Skin:** Various drugs can create local cautions or contraindications to deep or sustained touch. Common side effects include hives-like rash or photosensitivity caused by some antibiotics; acne-like skin eruptions caused by long-term use of corticosteroids, and bruising caused by anticoagulants.

A partial list of classes of medications that may cause side effects to skin such as rash or bruising includes antibiotics, anticoagulants, antihypertensives, antimalarials, antipsychotics, antiseizure drugs, antivirals, anti-inflammatory and NSAIDs.

**Digestion:** Nausea, diarrhea and constipation are by far the most common medication side effects, although the client may report these symptoms without connecting them to the effects of a medication. A partial list of classes of medications that may cause nausea or diarrhea includes analgesics and narcotics, anti-Alzheimer drugs, antiarrhythmics, antibiotics, anticoagulants, antidepressants, antihypertensives, antiinflammatories and NSAIDs, antinausea drugs, antosteoporosis drugs, antivirals, barbiturate or hypnotic sedatives, and cholesterol-lowering statins.

A partial list of classes of medications that may cause constipation includes analgesics and narcotics, anti-Alzheimer and antianxiety drugs, antiarrhythmics, anticholinergic or antispasmodic drugs, antidepressant, antidiarrheal drugs, antihistamines, antihypertensive, antiinflammatories and NSAIDs, antinausea and antosteoporosis drugs, barbiturate and hypnotic sedatives, cholesterol-lowering statins and skeletal muscle relaxants.
Specific functional tests to include in pre-massage **assessment are identified by your initial observations**, the results of your assessment of the client’s general health status, pain, and medication and medical treatment side effects.

*Sensation*: Certain medications, such as hypnotic sedatives, can cause paresthesia, while some antibiotics can cause hypersensitivity. Analgesic and narcotic pain relievers interfere with perception of sensation, and certain chemotherapy drugs can cause allodynia, which is extreme sensitivity to even feather-light touch. Dizziness is a side effect of many medications, too.

A partial list of classes of medications that commonly impair sensation or equilibrium includes analgesics and narcotics, anti-Alzheimer and antianxiety drugs, antiarrhythmics, antibiotics, antidepressants, antihistamines, antihypertensives, antiplatelets, antipsychotics, antiseizure drugs, antivirals, barbiturates or hypnotic sedatives, cholesterol-lowering statins and skeletal muscle relaxants.

Certain **medical treatments** create side effects or ongoing impact to structure and function, creating cautions that must be assessed before providing massage. Some of these treatments include:

**Surgery and other invasive medical or dental procedures**: Surgery, including dental surgery or treatments such as root canal or periodontal treatment, and other invasive procedures such as biopsy and lesion removal, can raise the risk for blood clot and transmission of infection. Signs of blood clot formation indicate deferring massage and referring the client to the treating medical practitioner for evaluation. Touch must be kept a hand-width away from the site of biopsy incision or lesion removal. Invasive dental procedures can require positioning and treatment modifications that are assessed during the interview and by gentle palpation.

**Radiation and TENS therapy**: Radiation treatment for cancer and TENS therapy (transcutaneous electronic nerve stimulation) for musculoskeletal pain can cause skin burns, lesions, hypersensitivity, or even breakdown of the skin’s structural integrity. Skin within a hand-width of such treatment sites must be visually examined and gently palpated to assess the appropriateness of touch.

**Permanent or temporary implanted and assistive devices**: The range of implants and assistive devices includes prostheses, pacemakers and defibrillators, temporary or permanent urine or feces collection apparatus, central lines or insulin pumps for medication delivery, as well as vision, hearing, speech and mobility assists. Gentle, frank discussion with the client allows you to assess the impact of an implanted or assistive device on massage treatment planning.

Assessing medication and medical treatment side effects. Scan the health history form to link reported health conditions to their likely medications and possible medical treatments. Question missing medication or treatment information that may indicate non-compliance, avoidance of necessary medical treatment, or that the client has neglected to enter appropriate data.

You also need to ask about any known allergies to medications or product ingredients. Posting a list of ingredients in products used in your practice alerts clients to potential allergens and saves time during assessment.

Remember, clients may not always identify a certain symptom as a side effect of a medication or understand the implications for massage therapy. For example, a client may not think to mention his ongoing diarrhea or have connected it to the antibiotic he’s taking, or realize that massage can exacerbate it. Another client may not know and therefore not mention that the pain medication she takes is causing her constipation, or that massage can help to alleviate it. By asking only “Do you have any medication side effects?” we miss the opportunity to elicit complete, accurate information that could help the client. When we know the common side effects of antibiotic and pain relief medications, for example, we can ask, “Is diarrhea or constipation a current problem?” and discuss strategies for addressing those side effects during massage.

Accommodating potential or known side effects and treatments in treatment planning is essential. Examine the client’s skin before applying deep touch, for example, and position the client to relieve nausea or to accommodate an assistive device. Avoid rocking or jostling for a client with nausea or diarrhea, and the prone position for a client with an abdominal stoma. Offer abdominal massage to relieve medication-caused constipation, and monitor the client’s ability to provide accurate feedback about touch, temperature and pressure.

If you regularly treat a client with multiple medica-
tions and dosages that may change frequently, research potential medication interactions by consulting a trusted pharmacist (for information that is not specific to any person and does not breach patient confidentiality), or visiting a trusted online resource.

Acknowledge accepted indications, contraindications and cautions. Keep touch a hand-width away from non-intact skin or a contained rash, for example, and if a rash is proliferative, consider using a modality with minimal skin-to-skin touch or circulatory intent. If a client’s medication may cause bruising, examine skin before applying deep or compressive touch, especially on the extremities.

Acute diarrhea is a systemic contraindication to massage. Avoid rocking, jostling, and the prone position for a client with medication-caused nausea or dizziness. Consider assisting the client onto and off the table. You’ll also need to adjust depth of pressure and modality choice to acknowledge a medication-caused disturbance to perception of sensation.

Functional assessment. Specific functional tests to include in pre-massage assessment are identified by your initial observations, the results of your assessment of the client’s general health status, pain, and medication and medical treatment side effects, and by the client’s subjective reports.

Selecting which functions to assess can also be clarified by identifying the cause of reported musculoskeletal pain, injury or restriction. If the client recalls the cause, ask her to briefly duplicate the actions (using unaffected structures) so that you can quickly identify the muscles and soft tissue structures vulnerable to injury. Consider, too, whether the following factors apply: Suddenness, speed and momentum: An unplanned movement that is rapidly performed, especially if it requires a significant change in the direction of momentum, is a likely source of strain, especially to postural muscles and antagonists in the action.

Force and impact: Actions requiring greater contractile and joint force and including significant joint impact can create patterns of strain throughout the body.

Duration and repetition: Sustained, repetitive actions result in muscle fatigue and enlisting of synergists that may be more vulnerable to strain.

Weight bearing and conditioning: An action performed with added weight, especially if the weight is unilateral or extended away from the body, contributes to strain, particularly if muscles and joints are in poor condition from disuse, disease or injury.

When combined, you can perform functional assessments quickly. Following observation of posture, for example, ask the client to take a few steps toward you—ideally, five to six steps, the equivalent of three strides—to quickly assess various components of gait. Then, with the client still standing (or seated when necessary), combine range of motion assessment with strength-testing and palpation.

Client participation is vital during functional assessments to ensure safe, accurate and efficient results. Encourage the client’s cooperation and communication:

- Describe and demonstrate what is being asked for, using terms the client understands. Being asked to radically deviate at the radiocarpal joint doesn’t encourage cooperation.
- Instruct the client to stop any activity that produces pain and return to a position of comfort.
- Model relaxation and breathing during each assessment. Saying “Relax!” has never, in the history of the world, calmed anybody down. Smile, make eye contact and talk with the client during each assessment so that she doesn’t feel like a specimen under examination.

State your findings as you note them so that the client can agree with them or realize that she is, in fact, tensing her right shoulder at the moment far more than is usual. Be sure to use non-judgmental words. For example, telling a client that she has weak biceps or that it’s her large abdomen that impedes thigh flexion is unhelpful and shaming.

Document a baseline of functional assessment results so you can gauge treatment progress. Repeat brief functional assessments on a scheduled basis to measure treatment progress and to update an ongoing treatment plan.

Posture. Assessment of a client’s posture can identify a range of structural and functional musculoskeletal conditions, including but not limited to scoliosis, kyphosis, and lordosis, torticollis and pectoralis minor syndrome, short-leg syndrome, knee hyperextension and flat feet.

Postural problems are identified by the degree of deviation from symmetry of midline and contralateral structures. In symmetrical posture, the head is aligned directly atop the spine in all planes and shoulders are level. Arms hang straight from the shoulder with forearms aligned with the thighs and the dorsal surfaces of the hands face laterally. Additionally, the pelvis, knees and ankles are in neutral. Kneecaps are equal in height, pointing forward and at a distance that allows free movement
between them. Feet also point forward, and the arches of the feet are equal.

You can quickly assess asymmetry in these postural landmarks by answering these questions:
• Is the spine aligned in all planes?
• Is either shoulder elevated, medially rotated or rounded toward the anterior? Are the scapular angles aligned and equal in proximity to the rib cage?
• Are the pelvis and kneecaps level?
• Is either foot inverted or everted?

Comparing structures with their counterparts and to visual reference points facilitates postural assessment. Use the structure of your treatment space to define reference points for comparison of postural landmarks. A doorway or corner can provide a vertical reference line, for example. The floor, the massage table, and a large painting or mirror can provide a horizontal reference line, and a light source from behind outlines posture deviations better than overhead lighting.

You can experience postural deviations firsthand by simulating them in your own posture for several hours at a time. You might consider wearing a thick-soled shoe on one foot and a flat shoe (or none) on the other foot, or spend a day wearing shoes with higher-than-usual heel angles. You could also maintain lateral flexion of your head, elevating the same-side shoulder.

A 60-second posture assessment to identify posture deviations and compensations can be performed by observing:

Drape of the clothing: Does the hem of a skirt or pants hang evenly or is it hitched up on one side? Does the neckline of her shirt drape more toward one shoulder or droop forward? Is a sleeve drooping over one wrist?

Condition of the shoes: Is the heel of one shoe noticeably more worn on the medial or lateral side?

Head position relative to the spine, when viewed from the side: Are the ears far in front of the shoulders? Is there a noticeable rounding or flatness in any region of the spine?

Angle of the chin in relation to the suprasternal notch: Is the chin angled more toward one clavicle?

Hands, as the client faces you: Are you seeing the thumbs, or do you see one or both dorsal hands instead? Are fingertips at an equal level alongside the thighs?

With these postural landmarks in mind, how many posture deviations and compensations can you spot in Figure 2 on page 73?

The 60-second posture assessment can be followed by a more comprehensive observation, if time permits or if no additional functional tests are planned. Ask the client to tuck her hair behind her ears so that you can accurately gauge the position of the head from the side, and to remove her shoes so that you can compare the angles of each foot from toe to heel and across the transverse arch. Even a slight heel angle impacts the position of the spine and creates compensatory strain patterns. Assessing the client’s posture in bare feet is more likely to reveal structural postural deviations.

Stand far enough away—at least five feet or so—that you can easily measure the client’s posture against the room’s reference points. Assess from all aspects. Viewing the 360-degree panorama of your client’s posture gives you a complete assessment of the planes, curves and angles of posture (ideally, there is sufficient space that allows you to easily move around the client).

Assess standing posture a second time, with shoes back on, and note any postural changes created by the heel angle. This second postural assessment may reveal functional postural deviations caused by a change in heel height.

Check in with the client to verify your findings. You might ask, for example, “Does it seem to you that your right shoulder is always a little higher than your left?” Although the client may have been unaware of it before, your statement may ring a confirming bell.

Stating and seeking agreement with assessment findings engages the client in the process, clarifies how treatment goals are being created and facilitates your documentation of the findings. Asymmetries you discover can indicate assessment of gait, range of motion, muscle strength and palpation, or even clarify therapeutic intentions. A shoulder or hip that is unilaterally elevated in standing posture, for example, should be observed in motion to see an accurate picture of its effects.
Gait. Gait is posture in motion. In other words, posture compensations are expressed during gait. During typical gait:

- Heel strike is equal
- Right and left step length is equal—about 31 inches (79 cm) for men and 26 inches (66 cm) for women
- Right and left stride length is equal—about five feet (158 cm) for men and 4-1/2 feet (132 cm) for women
- Step width is slightly narrower than shoulder width
- The arc of arm swing is equal and matches step length

You can simulate gait dysfunctions to learn how to quickly identify them during assessment. For example, eliminate your normal arm swing—first on one arm, then in both. Gauge how unilaterally or bilaterally restricted arm swing affects step length and step width. Consciously shorten the step length of one leg, and then both legs. Follow this by widening and then narrowing your normal step width, and note how these restrictions alter balance and the demand on your lumbar erectors and adductors.

Various components of gait can be assessed by observing a few strides:

- Is the heel strike of one foot noticeably harder?
- Is step or stride length greater for one leg?
- Is step width narrower or wider than shoulder-width?
- Is arm swing unilaterally restricted, or medially or laterally rotated? Does either arm swing across the body when viewed from the front?

If time permits and no additional assessments are planned, gait can be more thoroughly assessed:

- Observe gait from the side at eye level to accurately gauge the equality of step length and arm swing. Confirm a finding—such as unilateral elevation of the pelvis indicated by your initial assessment—by observing the client’s gait as he walks toward you with his hands on his hips, as seen in Figure 3.
- Observe gait from behind to gauge inversion or eversion of either foot, if suggested by the condition of the client’s shoes.

Dysfunctions assessed during gait can quickly confirm musculoskeletal imbalances observed during posture assessment, or can reveal other conditions:

- A heavier heel strike can accompany short-leg syndrome (the short-leg foot strikes the ground from a greater distance).
- Shortened step or stride length can result from shortened or hypertonic thigh flexors or extensors.
- Wider-than-usual step width can compensate for pregnancy, obesity, or other disruption to equilibrium, and strain thigh adductors and adductors; narrower-than-usual step width can result from adductor strain, and also hampers equilibrum.
- Unequal arm swing can accompany frozen shoulder, pectoralis minor or other thoracic outlet syndrome, for example, and forces shortening of step length in order to maintain equilibrium.

Posture and gait assessment findings may suffice to identify structural or functional imbalances and define therapeutic intentions. Certain gait findings, though, may suggest adding range of motion, muscle strength testing and palpation, in combination. Unequal arm swing or step length, for example, may indicate restricted range of shoulder or hip motion, and the drop of one foot before the natural rhythm of gait calls for it may be caused by weak dorsiflexors.
Range of motion. A client’s report of painful or restricted movement at a joint and gait assessment suggests that you assess range of motion at one or more joints, briefly comparing:

• A joint’s range of motion to its counterpart: Does the trunk laterally flex as far to the right as it does to the left, for example? The range of lateral flexion of the trunk can easily be compared by gauging the reach of the client’s hand along each thigh.

• Actual range of motion to expected functional range: Is the client able to flex both thighs to 90 degrees, or can he flex one thigh to only 75 degrees or so? You can quickly gauge the client’s actual to expected functional range by placing your arms or hands at the expected point along the range and gauging the client’s ability to smoothly move the joint to meet that point.

• Pain-free range: Does flexion of one arm beyond 45 degrees, for example, induce sharp pain?

Using the same vertical and horizontal reference lines you use to assess posture and gait, identify (or create) markers that correspond to 45 and 90 degrees of a circle and can be used to compare a client’s functional range of motion. After identifying and demonstrating the action to be assessed:

• Support the joint as you gently move it without the client’s participation (PROM), assessing the functional and pain-free range of motion, noting where end-feel occurs. Ask your client to tell you the point in the action where pain is first felt.

• Ask your client to move the joint without your assistance (AROM) through the range of functional and pain-free motion, as seen in Figure 4.

• Duplicate the actions on the contralateral joint using PROM and AROM, and compare the range of functional and pain-free motion at each.

• Compare and note the assessed range of functional and pain-free range of motion for the actions at the joint.

When interpreting the assessment results, consider factors that can limit joint range of motion:

• Structure of the articulating bones: The shape of the end of a bone may be congenitally malformed.

• Strength and tension of the ligaments: Taut, strong ligaments surrounding a joint help to maintain and limit range of motion to prevent injury. Repeated dislocations or sprains can destabilize range of motion.

• Contact with soft body parts: Excess adipose tissue or the size of a pregnant woman’s abdomen.

• Joint pathology or disuse: Conditions such as osteoarthritis, decreased hormone and synovial fluid levels and chronic immobility.

• Tension of the muscles crossing the joint: Hypertonic or hypotonic muscle fibers can limit or fail to produce complete range of motion at the joint they cross.

If you suspect that muscle hypertension or muscle weakness is limiting range of motion, consider assessing the contractile strength of muscles that cross the joint.

Muscle strength testing. Comparing the strength of the concentric contraction of a muscle on one side of the body to its counterpart can be more problematic than comparing joint range of motion. Dominance, conditioning and preexisting pathology are among the complicating factors when considering muscle strength testing and interpreting the results:

• In most instances, a dominant-side muscle displays greater force of contraction.

• A muscle that has been unused or immobilized due to injury loses its normal conditioning.

• Muscles acting as synergists may take over actions that a chronically weak muscle cannot perform.

• Various pathological conditions can affect muscle tissue or interrupt nerve stimulation for muscle contraction.
The results of previous assessments have helped you to identify one or more muscles for strength testing. Acknowledge the general characteristics of the target muscles in your mind when you interpret strength testing results:

- Phasic muscles tend to respond to stress or dysfunction by weakening and losing tone (becoming hypotonic).
- Postural muscles tend to respond to stress and dysfunction by chronically shortening and remaining in a state of semi-contraction (becoming hypertonic).
- Muscles that flex, adduct and medially rotate tend to contract with more force than muscles that extend, laterally rotate or adduct. In other words, equal force of contraction in both a flexor and an opposing extensor at the affected joint is a sign of dysfunction.
- An antagonist in an action may be more prone to injury than the agonist because it must allow but also limit an action rather than simply concentrically contract.
- The assistance of gravity can replace actual muscle strength. Effective strength testing prevents injury to a muscle by ensuring that the client is in complete control of the degree of force of contraction. Focused attention to testing steps keeps the client safe and ensures reliable results:
  - Describe the complete procedure to the client before beginning. Test the unaffected muscles first to get a sense of the client’s normal force of contraction, taking any complicating factors into account.
  - Place your hand or forearm close to the joint the muscle crosses, creating a barrier to—but not a force against—concentric contraction of the muscle, as shown in Figure 5. Do not push on a joint or muscle, or apply force against the direction of muscle contraction. The placement of your hand or arm limits but does not prevent muscle contraction.
  - Ask the client to push once against your physical barrier and to stop immediately if pain is felt. Instruct the client to release the contraction before it becomes isometric. You may need to brace yourself to prevent injury of your own depending on the size and strength differential between you and the client. Whenever possible, observe the muscle belly during the concentric contraction.
  - Assess the force of contraction of the opposing muscle and the same muscles on the affected side of the body using the same procedures. Assessment of muscle strength is very brief because you want to avoid muscle fatigue, acute pain and results affected by ancillary factors. Practice the procedures until you can direct and perform them smoothly in the amount of time you can realistically devote in a pre-massage intake session.

The Importance of Palpation

Palpatory touch communicates to a new client, “You are safe in my hands,” and reassures an ongoing client, “I am listening to your body.” Palpation of skin, bones, muscles, and soft tissues such as ligaments and other connecting structures is easily combined with any functional test, and provides information about the client’s structures for treatment planning. For example:

- Skin turgor—its natural strength and elasticity—decreases with age, and can also be adversely affected by chronic or temporary dehydration, surgical incision, or by chemotherapy or radiation.
- Erosion or malformation of an articulating bone end or landmark can affect range of motion; slackened ligaments compromise joint stability.
- Temperature variance may indicate inflammation or congestion, impaired circulation or stagnation.
- Hypertonic or hypotonic muscle fibers can be identified through palpation.

Palpating bones, muscles and soft tissues. Enhanced touch sensitivity and effective, comfortable pressure create efficient palpation on a standing, clothed client. Practice devel-
Diminishes the ability to provide accurate feedback about pressure. Once palpation pressure has been too deep, tissue resistance may impede palpation feedback. The most effective level of palpation pressure and individual tolerance for palpation pressure varies from client to client and from session to session.

Use these steps for efficient pre-massage palpations:

• Use your whole, relaxed hand: Using only your fingertips can feel “pokey” to the client and misses the sensory input you get from the whole hand, especially important when the client is clothed (as in Figure 6).
• Palpate the contralateral muscle or joint to compare tissue temperature, as well as a ligament’s contralateral counterpart to gauge tautness and a muscle during its contraction to gauge tone.
• Avoid interfering with an accompanying assessment. Palpation should not impede range-of-motion assessment or muscle contraction during strength testing.

Palpate with the results of your other assessments in mind, and use palpation results to identify structures for treatment, as well as cautions and contraindications. Keep touch a hand-width away from areas of non-intact skin or local inflammation, for example, and avoid shearing strokes over areas of poor skin turgor. Refer a client for medical evaluation if reported pain is not supported by your palpation findings regarding temperature, tissue strength or muscle tone. Avoid overworking a joint with restricted or painful range of motion that also feels hot when palpated.

Using Assessment Results for Treatment Planning

An ongoing treatment plan for a new or existing client fosters a continuing relationship that has many benefits. For starters, the client receives massage that addresses her individual circumstances and needs, and the massage therapist gains experience and skills through the planning and application process. An employer, too, realizes continued bookings at a more profitable level.

An initial treatment plan can be described in a few simple sentences that inform the client and enlist her participation. Components of an ongoing treatment plan include setting treatment goals, negotiating the choice of modalities and techniques, predicting the frequency and duration of treatments, defining the degree and type of client participation, and agreeing on methods for evaluating treatment progress.

Let’s create a treatment plan for the client described in the opening, first taking a look at the information available from the health history, the interview, and brief observation of posture and gait:

General health status: Excellent

Pain and inflammation: Low-level pain in her back and shoulder, neck and jaw, hip, knee; no obvious signs of inflammation.

Medications & medical treatments: None

Posture: Structural short leg with compensatory scoliosis; lengthened lumbar erector spinae muscles and everted foot on the short-leg side; “jammed” lumbar erectors, elevated shoulder and possible pectoralis minor syndrome on the long-leg side.

Gait: Hard heel strike on the short-leg side; foot sometimes fails to clear the ground on the long-leg side.

In the pre-massage time available, this client’s massage therapist can
use this initial information to select and quickly perform indicated assessments, in combination. You can assess range of motion and muscle strength to confirm pectoralis minor syndrome, and palpate muscles and other soft tissues (such as both iliotibial bands) to gain additional feedback about structural involvement and the appropriate pressure for this client. The results of these assessments pinpoint elements of the treatment plan for this client. For example:

- Identify focus areas, such as bilateral lumbar erectors and muscles that act on the scapula and the arm, as well as abductors and adductors of the thigh, and inverters and everters of the foot.
- Define therapeutic intentions, such as lengthening and clearing trigger points in chronically shortened muscles, loosening restrictions in connecting tissues such as the iliotibial bands, alleviating hypertonicity and local inflammation in pectoralis minor, and encouraging greater shoulder range of motion.
- Delineate safety and comfort measures, including acknowledging her increased risk for falls by staying close to the client as she moves about the treatment room and inserting pillows and bolsters to promote spinal alignment when lying on the table.

With this information in hand, we can complete the elements of the individual treatment plan for this client:

**Treatment goals.** Whether today’s session is her first or fiftieth, a client may know exactly what she wants from this massage or she may place herself wholly in your hands. In either situation, summarize the treatment goal in a single statement—using lay terms—that is grounded in pre-massage interview and assessment information so you can ensure both you and the client are on the same page. You might say to our client, for example, “I would like to focus today on easing the soreness you feel in your low back and encouraging more movement in your right shoulder. How does that sound to you?”

Return to this statement as you wrap-up the massage therapy session, and as the basis for continuing or revising goals for subsequent sessions: “Today, we worked on easing the soreness in your low back and improving your shoulder movement. Next time, I’d like to continue with those goals, depending on how you feel between now and your next appointment. How does that sound to you?”

**Modalities and techniques.** Within the scope of your training and education, describe the modalities and techniques you plan to use during the current and subsequent sessions. The names of modalities may be less important to the client than how they will feel during and after the treatment. Instead of using the term “hydrotherapy for inflammation,” for instance, our client may relate better to “a cool pack to relieve pain and swelling.”

If your assessments suggest using a modality or technique that is unfamiliar to the client, create a brief description of its intended effects and how the client will experience the session, using familiar terms. For a craniosacral therapy session, for example, you might say, “Craniosacral therapy detects and encourages the body to correct imbalances in structures. The touch is extremely gentle, you will remain clothed, and I won’t be using any oil or lotion.”

**Frequency and duration of treatments.** Treatment frequency and duration are defined by the treatment goals that have been set, and negotiating them is part of the post-massage communication. More frequent treatment may lead to faster resolution of the condition being treated, but may be unrealistic within the client’s scheduling or financial constraints.
In a perfect world, clients would always schedule appointments per your recommendation and could afford to come as often as you deem necessary. In the real world, describe for your client the ideal schedule of treatment frequency and duration, discuss how the regularity of treatment may relate to the consistency of progress, and confirm that coming somewhere in the neighborhood of that ideal contributes to treatment goals.

Client participation. Additionally, our client can choose to contribute to treatment goals in the days between massage appointments. With your guidance, for example, our client can alter work and play habits that contributed to the need for treatment, and can perform stretches and relaxation techniques to augment massage therapy.

After each treatment session, discuss the level of participation your client can realistically commit to. Negotiate and agree on the extent of participation, and acknowledge that the client might be limited to showing up for appointments twice a month or might not be able to participate in extensive homework of stretches and changes in work habits. For client participation to contribute to treatment goals, the choices must be realistic and achievable. Accept that your client’s intentions for following an agreement may outstrip the actual time she can devote to it.

Evaluation methods. Engaging your client’s participation in evaluating treatment results is essential for further planning. Agree on how progress will be measured and evaluated—range of motion improvement, decrease in pain level and deepened respiration, for example.

Repeating functional assessments and palpations following massage treatment, whenever possible, allows you—and the client—to gauge early treatment results and helps you to quickly revise focus areas, therapeutic intentions, and client safety and comfort measures for subsequent sessions.

Discuss the progress you have observed in concrete terms. For example: “You were able to raise your arm above your shoulder this week. The knots in your mid-back seemed to be less tender this week. Since we’re seeing great progress, I think we can scale back to one appointment every other week.”

Discuss any changes in the treatment plan that result from evaluating progress. For our client, for example, you might say: “Since we’re seeing great progress, I think we can scale back to one appointment every other week,” or “Since the progress isn’t quite what we’re hoping for, I’d like to suggest some additional stretches for you to do at home each day.”

The treatment plan we’ve just created for our client is probably not the only effective plan for addressing her conditions, but it illustrates the process of arriving at an initial plan. We efficiently assessed her health status, generally and specifically, and her structure and functions. Treatment goals and modalities were chosen, and frequency and duration of sessions identified. We also defined the degree to which the client can participate in between appointments, and discussed how treatment is to be evaluated.

Most initial treatment plans are amended to reflect subsequent pre- and post-massage assessments—not to mention an individual massage therapist’s training and the client’s preferences. Because this plan arises naturally from the results of specific assessments performed before the first massage treatment, however, our client is far more likely to return for subsequent appointments to experience better, faster treatment results, and to refer new clients.

Performing a proper assessment during intake doesn’t have to disrupt your schedule, and can give you information that is necessary to both ensure the client’s safety and provide a massage therapy session that best suits the needs of the client—which can go a long way in creating buy-in and loyalty.

If your assessments suggest using a modality or technique that is unfamiliar to the client, create a brief description of its intended effects and how the client will experience the session, using familiar terms.