PURPOSE:
To assess the rate and character of cardiac function.

CONSIDERATIONS:
1. Abnormalities in rate, amplitude or rhythm may be indications of impaired circulation and heart efficiency.
2. Auscultation at the heart’s apex can detect heartbeats that cannot be detected at peripheral sites.
3. Apical pulse should always be compared with the radial pulse.
4. If the radial pulse is less than the apical pulse, a pulse deficit exists. Pulse deficit signals a decreased left ventricular output and can occur with conditions, such as atrial fibrillation, premature beats and congestive heart failure.
5. If client has been active, wait 5 to 10 minutes before assessing pulse.

EQUIPMENT:
Stethoscope
Clock/timer with second hand

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain the procedure to the patient.
3. Help the patient into a supine position if heart sounds seem faint or undetectable. Reposition patient in a forward-leaning position.
4. Warm the diaphragm or bell of the stethoscope in your hand. Placing a cold stethoscope against the skin may startle the patient and increase the heart rate. Keep in mind that the bell transmits low-pitched sounds more effectively than the diaphragm.
5. Place the diaphragm or bell of the stethoscope over the apex of the heart (normally located at the fifth intercostal space left of the midclavicular line).
6. Using the stethoscope, listen and count the apical pulse for 30 seconds and multiply by 2 or for 60 seconds if the rhythm is irregular. If the heart rate is irregular, upon completion of auscultation immediately palpate radial pulse.
7. If there is a difference between the apical and radial pulse rates, subtract the radial pulse from the apical pulse rate to obtain the pulse deficit.

AFTER CARE:
1. Document findings in patient's record including site, pulse rate, rhythm and volume (full/bounding, weak/thready).
   a. Identify pulse patterns as:
      Normal - 60 to 80 beats per minute.
      Tachycardia - More than 100 beats per minute.
      Bradycardia - Less than 60 beats per minute.
      Irregular - Uneven time intervals between beats.
   b. If heart rate is irregular, note pattern, e.g., heartbeat 92 and irregular, every third beat skipped.
   c. Report to physician any abnormalities that reflect changes from the patient's normal baseline pulse.

REFERENCES: