

# KNEE REPLACEMENT

## Recovery at Home

*As the pain in her knees grew worse over the years, Mary Bradley knew the day would come when she would need to have them both replaced.*



*Shown: After a double knee replacement, Mary Bradley is back on her feet to train Brewster, her Treeing Walker Coonhound to become a certified therapy dog.*



And when that day came, she knew exactly how she wanted to approach her surgery and post-operation recovery and rehabilitation.

Ms. Bradley suffered a severe ankle break in her early 20s, requiring the insertion of multiple screws and pins to help it heal. Her doctor warned her then that her knees may deteriorate over time because of the added stress brought on by the injury. She knew she couldn't put off the surgery any longer when she wasn't able to complete daily long walks with her Treeing Walker Coonhound, Brewster, a rescue dog she is training to be certified for therapy.

"I would normally walk my dog for 45 minutes to an hour, but in October (2011), I could only walk two blocks before I had to come home," Ms. Bradley explains. "I wanted to go into it (the surgery) with as much information as possible. I discussed this with several people who had knee replacements and the most difficult part of their experience was not being able to recover at home."

Because she is an active 59-year-old who runs two book publishing businesses from her Metuchen residence, Ms. Bradley didn't want the procedure to slow her down and wished to return home as soon as possible. She also wanted to benefit from one of the most recent advances in knee replacement technology, patient-specific instrumentation, to help her achieve her goal.

Ms. Bradley found the perfect match for her needs when she was referred to Mark

Schottenfeld, MD, an attending orthopedic surgeon at Robert Wood Johnson University Hospital who is committed to using patient-specific instrumentation to perform the knee replacements he uses and having patients recover at home following surgery.

Working with RWJ's Discharge Planners, Dr. Schottenfeld connected Ms. Bradley with the Robert Wood Johnson Visiting Nurses (RWJVN) so she could transition to post-operative recovery and receive excellent nursing care and physical rehabilitation at home.

"Patients are more relaxed in their homes and the infection risk is probably reduced because there is no contact with other surgical patients," explains Dr. Schottenfeld.

Before undergoing surgery, Ms. Bradley had an MRI and a full-leg X-ray taken to assist the manufacturer with sizing her knee replacements, saving precious time. The precise images allow engineers to craft cutting blocks matched specifically to the patient receiving the knee replacement.

The cutting blocks assist with alignment and complete bone cuts matched to the patient's knee. This eliminates the need to insert alignment rods, which can increase bleeding. The cutting blocks are then used as the molds to manufacture the replacement knees.

Because the replacement knee is closely matched to the patient's knee, the procedure is reliable and a smaller incision is possible (4-inches instead of 8). The procedure leads

to reduced surgery times and requires less time under anesthesia for patients, contributing to faster recovery.

Ms. Bradley returned home just days after she had separate knee replacements in February and July.

"Education is important. We spend up to two hours pre-operatively educating each patient about the benefits of early discharge to home rather than another facility," Dr. Schottenfeld notes.

Once home, the RWJVN provided expert nursing support, supervision and communication and Physical Therapist Jennifer Legendre, who is certified as an Orthopedic Clinical Specialist, mapped out a demanding physical rehabilitation therapy schedule to help Ms. Bradley achieve her personal goals.

"Jennifer was terrific," Ms. Bradley says. "She focused on my personal goals and got me going. When you have a surgery that will impact your mobility and you're fairly active, it can be depressing. She was my cheerleader whenever I became discouraged."

Home recovery and rehabilitation, Ms. Bradley believes, helped speed her recovery. "You feel more comfortable and control when you're at home," she explains. "RWJVN was fabulous."

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*Shown: Mark Schottenfeld, MD, attending orthopedic surgeon at RWJ worked with RWJ Visiting Nurses so Ms. Bradley could transition home after surgery.*