Stroke of Bad Luck

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Background

The passage of the Affordable Care Act (ACA) on March 23, 2010, laid the groundwork for significant changes to both the delivery of and payment for health care services in the United States. Provisions of the ACA, implemented over a 4 year period beginning in 2010, include ¹:

- A Patients Bill of Rights
- The addition of key preventative health services at 100% coverage
- Accountable Care Organizations
- Health Insurance Marketplace with income based subsidies for premiums
- Expansion of Medicaid programs in states that elected to participate

Prior to full implementation of the ACA in 2014, health care spending in the United States was growing every year. In 2012 health care spending in the United States was $2.8 trillion² and was growing 2.4% faster than the annual U.S. Gross Domestic Product (GDP) measure³. However, by 2013 annual per capita spending had slowed to an annual growth rate of just 1.3%, which is only one-third the long term historical average. Also noted in this time was the slowest growth in health care inflation since 1962, at just 1% ⁴. There are still looming concerns about the impact of an aging population and incidence of known costly health conditions such as cerebrovascular accidents (CVA), also referred to as ‘strokes.’

Modifiable risk factors associated with strokes are cardiovascular disease, high cholesterol, smoking, obesity, hypertension, and diabetes⁵. Though there has been a decline in both hospitalization rates and mortality from stroke over the past decades⁶, stroke continues to be the ⁴th leading cause of death for adults in the United States ⁷ and a significant contributor to disability among those who survive⁷. According to the National Institute of Neurological Disorders and Stroke, over 700,000 persons each year have a stroke, with approximately two thirds surviving and requiring rehabilitation⁸. Although stroke outcomes are improving overall nationally, there are still parts of the country where stroke incidence remains higher than the national average, and where incidence of the risk factors for stroke are also higher than average. This area is known as ‘the stroke belt’, and is located mostly in the southeastern United States ⁷.

Kentucky is one of the states in the stroke belt, and ranks in the top 10 among all states for both heart disease and stroke mortality⁹. Kentucky is a state with an abnormally high rate of stroke, particularly in the Eastern and Bluegrass regions of the state. The high rate of stroke is likely the result of under-diagnosis and under-treatment of stroke risk factors, in addition to social determinants of health. Poverty and poor health behaviors, poor access to health care and low levels of health literacy are some of the factors of concern. In addition, the stroke population in Kentucky is abnormally young, with only roughly 60% of stroke survivors over 65 years old.

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The state has several initiatives in place to address the issue. One initiative that is the direct result of the ACA is the formation of one of the first Clinical Integration Networks in the area, the South Tree Health Network (STHN), as described in an upcoming section of this document.

**Clinical Integration Network Board Meeting**

The Board of Directors of the new Clinical Integration Network of South Tree Health Network has called an unplanned meeting to discuss the latest data from their system related to stroke. In spite of broad educational and community action efforts to reduce the incidence of stroke based on prevention, diet and exercise, data from newly created Clinical Integration Network shows rising numbers of strokes in members, with increases in the associated costs for treating and managing this population. In attendance at this meeting are:

- The chief executive officer of STHN (MHA)*
- The chief medical officer of STHN (MD)*
- The quality improvement director of STHN (MBA)
- The chief compliance officer of STHN*
- Vice president of medical affairs for STHN (MD, MHA)
- The chief nursing officer of STHN (RN)
- Director of pharmaceutical care for STHN (PharmD)
- Department of Health Director of Population Health (MPH)
- Wildcat Home Health administrator (MBA)
- Winston Transitional Care Rehabilitation Center Director (OT)
- Primary care clinical leader (NP)
- The chief medical officer of Bluegrass Blue Cross (MD)
- Senior VP for Provider Relations of Bluegrass Blue Cross
- Southeast AHEC Director (nursing home admin)
- Medicare beneficiary* (‘patient’)
- Guest: American Heart Association, Regional Director

*Denotes required membership on the board
The meeting began with an overview of relevant statistics regarding the health challenges of the region in Kentucky served by the Clinical Integration Network of STHN, according to data from the state action plan: http://chfs.ky.gov/NR/rdonlyres/90E41C2D-45EF-47EB-ABFD-60FBE326F59D/0/KYStatePlan_LowResFinalv6.pdf

In addition, the Kentucky Dept. of Health director presented information about some of the regional, socioeconomic, and cultural variables that affect health care utilization in Kentucky. Examples such as poor access to affordable nutritious food and exercise training, fundamental mistrust of the medical system, a cultural value of self-reliance and poor utilization of healthcare resources, and the social stigma of having a medical condition were all discussed. Finally, a discussion of the current state of health care delivery in the SouthTree system, and in the Clinical Integration Network in particular followed.

The Clinical Integration Network was formed to take charge of the health of the population with a special emphasis on stroke prevention. Its challenge, the board realized, was to reimagine comprehensive care for this population in light of the historic underlying issues of misunderstandings and erroneous assumptions about whose responsibility it was (the clinics? the insurer? the Dept. of Health? Etc.) to keep this population healthy. Other issues exacerbating the situation are a shortage of some healthcare professionals, and a lack of common understanding of the problem between all entities in the system (For example, the hospitals focus on the need to keep people from being readmitted to avoid a financial penalty, and don't truly understand the issues clinics are dealing with when trying to manage people with multiple medical issues in a timely manner post discharge from a hospital).

The board came to the conclusion that they want to have a comprehensive new plan to more effectively manage care and promote health for persons at risk for stroke, to be unveiled during National Stroke Awareness Month in May 2015. As a resolution, they have decided to contract a consulting group to holistically evaluate their current processes system wide and create a plan to address the needs of the Clinical Integration Network of STHN.

The Charge

As members of the hired consulting group, you are asked to create a vision of how to involve local and regional institutions (both medical and educational) and community resources in an integrated plan that utilizes best practices in interprofessional teamwork to enhance the process of care, from prevention to treatment to community-based follow up targeted to ensuring patient-centered care plan outcomes. This integrated plan must identify metrics of success that are targeted to the Triple Aim: improving patient experience, improving population health, and reducing the cost of healthcare.10
The following must be captured within this comprehensive plan:

- A proposed relationship between educational and health care systems as part of the care delivery system
- Pertinent clinical indicators of improved care across the system
- Relevant measures of patient satisfaction across the system
- A projection of how the plan will improve the health of the population as evidenced by the metrics noted above
- The costs associated with implementing the plan
- An assessment of why the costs would be a good investment for the Clinical Integration Network of STHN

In addition, as it has considered the stroke incidence data, the STHN Board is concerned about the degree to which it should or should not assume risk in its contracting arrangements as the enrollment in the STHN products grow. More specifically, the comprehensive plan should address whether or not STHN should be pursuing contracts through:

- Total cost of care arrangements, where the STHN providers are at risk for all costs for the enrolled STHN Plan members (Bluegrass Blue Cross is pushing for this approach at some point)
- Shared savings arrangements, in which the STHN providers would share in the ‘upside’ if targeted quality and cost outcomes for the enrollees are achieved, and might have some ‘downside’ risk within defined corridors
- Bundled payment arrangements, in which the STHN providers would be paid a defined amount of money for all of the care delivered to a specifically defined patient population with certain medical conditions within a given timeframe (such as all of the care delivered to stroke patients for one year after the occurrence of the stroke)
- Traditional fee for service arrangements, in which the hospital where the stroke patient is initially hospitalized receives a DRG type payment for the initial hospitalization, and the remainder of the care delivered is paid on a negotiated fee schedule with each of the respective providers

The STHN Board is interested in hearing your recommendations with regard to future payment systems for stroke specifically, and more broadly as a core strategy of STHN. In particular, to the extent that STHN assumes risk, how will the risk and future potential bundled payments be distributed across the providers in STHN? To see a video vignette depicting the STHN Clinical Integration Board Meeting, click here.
SouthTree Health

South Tree Health Network (STHN) was formed in 2012 as a Clinical Integration Network. The purpose of STHN is to improve performance related to the Triple Aim: improve the patient experience (clinical quality and patient satisfaction), improve the health of the population, and improve affordability of care.

The member organizations of STHN include:
- Hazard Appalachian Regional Medical Center
- University of Kentucky Health System
- 4 other community hospitals in the region
- 6 multi-specialty physician groups in the region, of between 12-40 physicians each
- Winston Transitional Care Rehabilitation Center
- Wildcat Home Health, the largest home health provider in the region.

STHN’s focus is on improved care coordination toward advancement of the Triple Aim. Teams are actively at work developing shared quality programs, shared clinical protocols, and referral processes. Most, but not all, of the Member organizations use the same Electronic Health Record (EHR) platform. STHN has a vision of entering into health plan contracting and risk contracting as a network, targeting a ramp-up to over 100,000 enrolled lives in the next five years. STHN envisions working with Bluegrass Blue Cross (though on a non-exclusive basis) as its health plan partner. STHN would become the “featured provider network” in a health plan product under development between Bluegrass Blue Cross and STHN; Bluegrass Blue Cross will also provide third party administrator services and population health analytic services to STHN.

To date STHN has entered into a pilot program with the State Medicaid program, in which STHN has contracted for the care of about 1500 lives. STHN, along with Bluegrass Blue Cross, also offers a product on the Kentucky Health Exchange, and has about 2500 lives covered in the product. Though these enrollments are modest now, other growth and contracting initiatives are under development, including the commercial market and the possibility of becoming a Medicare Accountable Care Organization (ACO). STHN is approaching such growth cautiously, as the Member organizations are aware that many of the health indicators in the region are not good. As described earlier, the high incidence of stroke in the region is seen as being a particular challenge.

STHN Member organizations offer a number of stroke-related initiatives, including:
- Free hospital based community education programs about diet, nutrition and exercise to prevent heart disease and stroke
- Advertising that highlights the warning signs of stroke and where to go for treatment
- A mobile health screening program at senior centers and places of worship, which provides free screenings for blood pressure and other warning signs of stroke
These initiatives, however, are not all coordinated among the STHN Member organizations. More importantly, the care processes are not well coordinated, as evidenced by multiple patient experiences and reported clinical outcomes for the population.

**About Gingko Grove**

Gingko Grove, a town of 3,843 people in southeastern Kentucky in far southern Perry County, is ranked by the Appalachian Regional Commission (ARC) as a ‘Distressed County.’ Based on a comparison of three economic indicators—three-year average unemployment rate, per capita market income, and poverty rate—to national averages, the county is, therefore, among the 10% most distressed of U.S. counties. The main employers in Gingko Grove are in the areas of construction, food processing, trucking, and mechanics/maintenance. Gingko Grove has its own elementary school, and students attend one of two middle schools and two high schools serving the county.

Students interested in pursuing health-related careers typically enroll in local or nearby postsecondary institutions. Gingko Community and Technical College offers associate degree programs in Nursing, Medical Assisting, Physical Therapy Assisting, and Respiratory Care. Eastern Kentucky University, about 80 miles away in Richmond, Kentucky, offers additional undergraduate and graduate health sciences programs, including a BS in Nursing, Doctorate of Nursing Practice, Health Services Administration, Masters of Public Health, Medical Laboratory Science, Master’s and Doctorate degrees in Occupational Therapy, Social Work, and others. ([http://programs.eku.edu/](http://programs.eku.edu/))

In addition, the state’s very active Area Health Education Center (AHEC) program enables students in those and other institutions to gain active health experiences both locally as well as in other rural sites across the state. Perry County has Hazard Appalachian Regional Healthcare Medical Center, a 308 bed, acute care hospital which has a stroke partnership with the University of Kentucky Stroke Affiliate Network.

**Patient Profile**

**Lynette’s Story**

Lynette Tate is a 53 year old Caucasian female who has lived in Kentucky for her entire life. Born and raised in a rural town called Gingko Grove, Lynette graduated from high school in 1979 and moved with some friends to a larger city two hours away, where she was able to get a job as a receptionist at a small family owned business. She worked there for three years before her family beckoned her back to Gingko Grove to move in with her grandmother who had had a stroke and was unable to live alone. For the better part of a year, Lynette took care of her grandmother nearly full time and worked as a waitress at a local restaurant for spending money a few hours a week. After her grandmother passed away, Lynette—at the age of 22—married Jim, a man she knew from high school and someone who had been a regular at the restaurant. They
moved into the tiny home her grandmother had left to the family, happy to have their own place for just the cost of the taxes and utilities.

The couple had three children: Susan, Chad, and Christine, within their first four years of marriage. They were all delivered at home by Lynette’s cousin, an unofficial midwife. The pregnancies were unremarkable, although Lynette gained 50 pounds with Christine, who was 11 pounds at birth. Lynette felt that the third pregnancy was hard on her, and recalls that she never did feel good until nearly six months post-delivery, when she “started to feel like my old self”. Lynette stayed at home with the children. Her husband had his own health concerns, mostly related to his very physical job in the coal mines working for an employer who was notorious for cutting corners to save money. The family did have company sponsored health insurance; however it was a bare bones policy that only covered hospitalization after they had met an annual deductible of $5,000. The family had no dental insurance. This did not concern the couple however; both felt their health was ‘good enough’, and their children seemed to be fine. At the age of 48, Lynette was widowed when Jim died in his sleep of a massive heart attack at the age of 49. She was now alone with no recent employment history, resources, life insurance money (Jim’s policy only covered work related accidental death), or health insurance.

While Lynette had the support of her children, she understood that they were young adults grieving the loss of their father and struggling to begin education, careers and families. Her oldest daughter, Susan, found her mom a job cleaning a church once a week for minimum wage. Soon, Lynette was also covering for the church secretary when she was out ill or needed a day off. When the secretary retired one year later, Lynette took the 25 hour a week job. She still had no health or dental insurance, and when her daughter Susan looked into it for her, she discovered that between Lynette’s wages and the social security payment from her late husband, Lynette did not qualify for Kentucky Medicaid. It wouldn’t have mattered anyway, because Lynette was not about to ‘go on a program’ from the government.

One year later, Lynette saw an ad for a full time job as an administrative assistant at the local car dealership. She applied and was hired. This position did come with health insurance; however Lynette deemed the $300.00 a month premium too expensive. Even though she was making more money now, Lynette felt the money would be better spent on overdue home repairs and helping her children. The Affordable Care Act, just passed, did not yet mandate individual insurance coverage. Lynette felt her health was ‘pretty good’ because she took no prescription medicines, never smoked, did not drink, walked two blocks each way to her new job, and ate mostly home cooked meals to which she invited her children frequently. She did experience occasional episodes of dizziness and headaches, but attributed them to menopause and the stress of her new job. At the recommendation of her sister Rose, Lynette started drinking a special tea made from an old family recipe that used leaves from a nearby Gingko tree, to help alleviate her symptoms. The Gingko tea seemed to help.
In late 2013, Lynette purchased a new lower cost option for health insurance on the Kentucky Health Exchange, offered by SouthTree Health Network and Bluegrass Blue Cross. Lynette signed up for the plan because it was now the law that she carry health insurance. One of the benefits of the plan was that it carried no additional cost preventive screenings and checkups. However, Lynette did not take advantage of those benefits, deciding that she would wait until she got sick, then ‘go find a doctor’ and see what her new insurance would provide. She was just happy to have the peace of mind knowing that if she needed it, she would be covered.

Lynette continues to live in the 100 year old one-and-a-half story bungalow she inherited from her grandmother. Though she prides herself on keeping it clean and organized, it is in need of repairs. There are loose floor boards in the hallway, and the roof leaks in several places. The outside steps up to the main door are crumbling, and the railing next to them has detached from the house, rendering it useless. Her three children worry about her living alone. Susan, the oldest at age 29, lives two hours away in a larger city. She works as a cosmetologist for a national salon chain and has three children. Her time is very scheduled and not flexible; she tries to see her mother once a month and calls her frequently.

Chad, the middle son at age 27, works in construction and lives two towns over from his mother, which is about a 15 minute drive away. He stops by her home when he is in the area and tries to help her with home projects as he is able. When he is in the peak of the construction season, March through October, he often works 12 hour days and travels several hours to work on site. He sees his mother about once every two weeks. Christine, the youngest at age 25, is a child care worker at a local preschool and attends college part time to study elementary education. She lives with three friends in a home about two blocks from Lynette. She sees her mother nearly daily as she stops by to eat dinner with her. Christine also does her laundry there and often goes to her mom’s house to study when she needs a quiet place away from her roommates. Christine helps out with the family dog, Charlie, a Golden Retriever who is three years old and who can be a lot of work at times. The kids gave Charlie to Lynette as a mother’s day gift after their father died, hoping he would keep her company.

On June 30, 2014, Lynette awoke and felt fine, and lay in bed for a bit as she usually did before getting up to get ready for work. A few minutes later when she finally decided to get out of bed, she fell when trying to stand up. (She later reported that her right leg gave out and her arm felt ‘slow’.) She managed to reach her cell phone and mumbled a call to her daughter Christine, who arrived about 10 minutes later to find her mother lying on the floor. Alarmed by her mother’s physical state, her slurred speech and her drooped face, Christine called her brother Chad who arrived 10 minutes later. Collectively deciding medical care was needed, the two of them somehow managed to get Lynette out of the house and into Christine’s car. They drove her to the local urgent care three miles away, where the physician on call had her transported via ambulance to the ER at the Hazard Appalachian Regional Medical Center 20 miles away.
Upon her arrival, a head CT scan revealed that Lynette had experienced a left hemispheric ischemic stroke. Lynette reported that her symptoms had begun approximately one hour earlier, so the physicians administered tissue plasminogen activator (TPA) in attempt to dissolve the clot in her brain that was causing the symptoms. Blood tests revealed that Lynette also had a history of very high blood sugars (glucose of 370 mg/dL and A1C 14.4%); total cholesterol of 365 mg/dL (LDL of 190 mg/dL, HDL 20 mg/dL, triglycerides of 600 mg/dL) and high blood pressure of 180/105. Unfortunately, Lynette did not respond to the TPA, and was admitted to the acute inpatient unit of the hospital which did not have access to specialists trained in advanced interventional techniques for stroke.

After the first 24 hours, Lynette’s functioning now seems to be improving. She is able to bear a bit of weight on her right leg, and she can now move her right arm a bit, though her lack of hand function is still of concern as she is right-handed. Her facial droop has disappeared. Lynette’s inpatient nurse conducted a fall risk assessment using a standardized tool and determined that she is at high risk for a fall, so Lynette is instructed to use her call light when she needs to get up to use the bathroom. The MD requested occupational and physical therapy evaluations and both disciplines have recommended that Lynette be discharged to Winston Transitional Care Rehabilitation Center. (The acute care hospital no longer provides inpatient rehabilitation services due to changes in reimbursement that have made it impossible to operate at a profit). The MD also asked the pharmacy team to do a medication reconciliation to address Lynette’s current and past medication history. The medical social worker locates an open bed in the rehab center, which is about 40 minutes away from Lynette’s home, and discharge to the facility is planned for tomorrow afternoon.

In the early evening of her first day as an inpatient, Lynette’s sister Rose pays a visit, she brings Lynette’s favorite treat, molasses cookies. Lynette is lying in her bed with her head elevated, and her dinner tray has just been delivered to her. The dinner menu this particular day is Salisbury steak with gravy, a baked potato, green beans, salad, bread, and canned sugar free peaches. The menu card indicates that this is a ‘diabetic’ dinner. Rose insists that Lynette eat, and lifts the lid off the tray for Rose’s inspection. Lynette is not pleased with her dinner; she finds it bland and tasteless. She tells Rose: “I cannot eat this bread without some jelly. Can you ask if they have some jelly?”

Rose finds the nearest employee, who is a housekeeper, and asks her to come to Lynette’s room, saying: “There’s been a mistake. My sister isn’t diabetic, and she would like some jelly.” The housekeeper indicates that he will find a member of the nursing staff to provide the jelly. Meanwhile, Lynette has decided to try the peaches. Using her left hand to feed herself since her right is still not functioning well; she manages to get a few slices into her mouth. Rose notices that Lynette is coughing after eating a few bites of peaches. The RN enters the room, and Rose, now forgetting about the request for jelly, voices her concerns about Lynette’s coughing, which is now sounding a bit wet and gurgled.
Rose asks Lynette: “Do you feel like you are getting a cold?” and Lynette says: “No, I’m fine.” The RN assesses Lynette and reviews her medical record. He suggests that Lynette have no solid foods until she contacts the physician. The physician immediately orders a STAT swallow study and recommends a clear liquid diet until the swallow study results are completed.

At the same time Lynette’s sister is visiting, a pharmacy intern is conducting a review of Lynette’s home medications. Lynette reports “I don’t think I have any known drug allergies. At least I haven’t reacted to any medications. But then again, I don’t take any.” Lynette says she does not take any prescription medications or any over-the-counter medications currently or in the past. Her sister interrupts bluntly stating “What about the time when you took my pain medication for your head?” It is determined that Lynette took two of her sister’s Vicodin tablets, only one time, about a month ago.

Early the next morning, the video swallow study is completed by the speech therapist, who calls the MD to give a verbal report. In addition to oral residue after swallow and aspiration with thin liquids, the speech therapist also notes a lot of inflammation and bleeding in Lynette’s gums. The speech therapist recommends, and the MD orders, a diabetic, cardiac, mechanical soft texture diet with nectar thick liquids, and the hospital dietician comes up to Lynette’s room to discuss meal planning with her. The speech therapist also comes by, and explains to Lynette that she is not able to safely swallow all of her foods and liquid. Therefore, she needs to be on a special diet. Other interventions will be offered to her at the Transitional Care Rehabilitation Center to improve her ability to swallow. To see a video vignette depicting Lynette’s Hospital experience, click here.

Due to the tight turn around, the speech therapist has started, but not yet completely documented results of the swallow study and recommendations to the MD and patient into the hospital EHR system. Hospital policy requires that therapy documentation be completed by the end of the day, so the speech therapist plans to complete the evaluation write up and patient contact note before he leaves. The speech therapist is aware that the patient is going to the rehab center, but does not know the timeline as that was documented elsewhere in the EHR, and was not included on the STAT video swallow study order.

Early on the day of discharge, while Lynette is in the video swallow study, the hospital social worker makes a call to the intake coordinator at Winston rehab center to provide a verbal report of the discharge recommendations. The social worker has read the therapy and MD’s notes as of 7:00 am today when she arrived, and that is the basis of her report of recommendations. She tells the intake coordinator that the medical record will be available later on the day of admission to the rehab center. However, because the rehab center is on a different EHR system, it is routine that only a physician discharge summary get sent to the center with the patient. Notes from additional health care providers are sent if available and in this case the notes from the speech therapist were not transferred.
Lynette is transferred to the rehab center by hospital transport later in the afternoon. The rehab center Nurse Practitioner asks the onsite occupational and physical therapists to see Lynette, but does not order speech therapy. Lynette arrives and participates as directed. There is a lot of paperwork she is asked to sign, which she tries to do with her left hand. At about dinner time, her son Chad and daughter Christine arrive, and tease Lynette about her ‘bedhead hairdo.’ A dietary aide brings in Lynette’s dinner, and inspection of the dinner tray reveals a regular diabetic diet, which Lynette again dislikes. Chad offers to run out to the local fast food place and grab food for the three of them. As he is about to leave, Lynette says to him “I think I’m only supposed to eat soft foods, so please get me a soda and fries.” Later as they eat, Lynette again begins to cough. Christine asks “Mom, are you ok?” But, Lynette just brushes it off with “Something went down the wrong pipe, I’m ok.” Her best friend, Sophie, visits in the early evening, bringing flowers, lemonade and more of Lynette’s favorite molasses cookies. Lynette asks Sophie to put the cookies in the drawer of the nightstand next to her bed on the left side where she can reach them later if she wants a snack.

The next day, Lynette’s full record from the hospital is made available to the rehab center. The order for the special diet is noted, and Lynette begins receiving meal trays that are diabetic, cardiac, and according to the special dysphagia diet. Lynette picks at the food, and supplements it with her stash of cookies. She continues to have ‘coughing spells’ when she drinks liquids from her diet tray and when she eats her cookies, but they seem to pass. Occupational Therapy (OT) and Physical Therapy (PT) complete their evaluations, and Lynette begins therapy right away that afternoon. Therapy at the rehab center is provided by a private contract company; the therapists are not employees of the rehab center. They do not participate in the daily nursing report, but rather, have their own ‘briefing’ each day over the noon hour to discuss how many minutes of therapy each patient is receiving.

Lynette begins receiving two hours or more of OT and PT each day. By day seven she is making good progress. She is now walking with a two-wheeled walker, is able to use her right arm and hand to assist with dressing and can feed herself. PT is working on her balance and ambulation; OT is teaching Lynette some compensatory strategies for managing self-care and simple homemaking tasks, as well as having Lynette use her right arm and hand as much as possible in therapy activities. On day seven during a therapy session occurring over lunch, Lynette ‘confesses’ to the OT that she sneaks a cookie once in a while. The OT laughs, and then presses her for more details, because she knows that Lynette is on a special dysphagia diet. When she asks Lynette, “And what does your speech therapist say about that?” Lynette says: “What speech therapist?”
The OT later reviews Lynette’s rehab center EHR and digs deep into the medical record transferred from her inpatient record, where she sees in a physician note that, in fact, speech therapy was recommended in the rehab center, but never ordered. She reports this to the RN, who in turn states she will tell this to the MD and get an order for speech therapy. Meanwhile, OT and PT are anticipating discharge to home with follow up OT and PT via home care in the next few days.

The next day, Lynette awakens and does not feel good. She refuses to participate in therapy; therapy staff alert the nurse, who takes Lynette’s vitals and discover that she has a slightly elevated temp at 99.9. The nurse contacts the MD, who orders acetaminophen as needed to reduce her fever, noting that there is a ‘bug’ going around the facility. Lynette is given Tylenol at 10:00 am and falls back asleep. At noon, the nurse comes to check her vitals and notes that Lynette still has a low grade fever. Lynette states she feels a bit better, and agrees to participate in her afternoon therapies.

The next day, Lynette awakens with a cough and the feeling of pressure in her chest. She tells the aide who brings in her breakfast tray, and the aide hands her the call light and tells her to call for the nurse. Lynette pushes the button, and six minutes later, someone answers. She relates her concerns, and in 10 minutes, the RN comes to her room to take her vitals. This time the RN listens to Lynette’s lungs, and notes that they sound crackly. She alerts the MD, who orders a chest x-ray. The x-ray reveals pneumonia, caused by aspiration of food and/or liquids. The MD is baffled; Lynette has been on a dysphagia 2 diet to prevent exactly this from occurring. He puts her on IV levofloxacin and orders another video swallow study to be done by speech therapy, which has to be completed at a nearby outpatient center. Later that day the MD retrieves his voice mail messages and hears the RN reporting the missed speech therapy order. This turn of events sets Lynette’s discharge back seven more days as she recovers from the pneumonia. She misses three full days of occupational, physical and now also speech therapy. She is weakened by the lack of activity. When therapy resumes, she cannot tolerate the same amount of time in therapy so she participates at a reduced level. When her recovery is close to where she was prior to the pneumonia, the team decides to discharge her back to home, recommending home care to follow her.

Lynette has now been home for two weeks. The MD ordered nursing three times a week; a home health aide (HHA) to assist with personal cares two times a week; OT, PT and speech therapy evaluations. Lynette was discharged with new prescriptions: lisinopril, amlodipine, insulin (Lantus), blood glucose meter, test strips, lancets, metformin, simvastatin, and aspirin. Lynette’s policy through the STHN Clinical Integration Network covers 24 skilled nursing and 16 HHA visits per year with no co-pay or prior authorization required; therapy (OT, PT and Speech) requires prior authorization. Authorization for therapy must occur every 30 days. If authorized, therapy evaluations and visits from each discipline are covered with a $25.00 copay for each visit. There is a cap of 40 total therapy visits (total between all therapies) in a calendar year.
So far, only the RN, the aide, and the speech therapist have been out to see Lynette. This is because the home care agency, Wildcat Home Health, which, though a part of the STHN, uses many per diem contract therapists, who are paid per visit. This practice is the result of a critical shortage of both OT and PT in the company. Per diem therapists help fill the void. Unfortunately, per diem therapists work at will, and getting therapists to travel to the more remote rural areas can be difficult, especially because Wildcat Home Health does not reimburse per diem therapists for mileage. (It is inaccurately assumed that the per diem visit rate covers travel expenses).

Although she is happy to be back with her dog, Charlie, Lynette is struggling at home. Even though the nurses in the transitional rehabilitation center showed her how to take her own blood sugars, she finds it difficult to do at home with her right hand because it is still not as coordinated as it was before her stroke. The home care RN has been teaching Lynette as well how to test her blood sugars and use the insulin pen. Lynette seems to do ok with the RN, but when on her own she gets nervous and has difficulty managing the insulin pen. She has begun using the easiest setting on the pen so she does not have to manipulate it as much. She has no idea what is the correct amount of insulin, but thinks that some is better than none. She has asked the aides who come in to help her shower if they can assist her to take and accurately dose her insulin; however, they have informed Lynette that they are not allowed to do so.

Though she has been working with speech therapy to improve her swallowing and her diet has been upgraded to a diabetic diet with thickened liquids, she finds that the only things she can easily prepare for herself are starchy pre-made convenience foods that her kids have been bringing to her. Friends regularly come by to visit, and they often bring healthier homemade food, but also starchy treats. She is unable to drive, and has not had any fresh fruit or vegetables since she has come home because she cannot get to a grocery store.

She is also tired of trying to use her walker at home; she seems to be getting ‘stuck’ constantly in her small spaces, and has begun to just leave the walker in a corner and instead hang on to furniture and the walls as she walks from point A to point B. She has tripped several times on her loose floorboard, though her son did try to wedge it back in the last time he was over. The ‘fix’ only lasted a day or two before it popped loose again, though. She has also nearly tripped over Charlie several times as he often seems to be underfoot. Once when she let him out, he managed to get out of her fenced yard. When she tried to go outside to call for him, she stumbled down the crumbly flight of stairs and landed on her backside. Luckily, her neighbor saw it happen, and assisted Lynette back into the house. She was not hurt, and did not report the incident to the nurse at the next home visit.

Lynette is also getting depressed. Out of work on a medical leave, she only had one week of paid time off accumulated when she had her stroke. She has not received a paycheck in a month now and is worried about the bills that are piling up on her kitchen table. In addition, Lynette

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complains “The medicines they prescribed to me are expensive,” and she worries about how she will continue to pay for them in the long term. The home care nurse, frustrated at the lack of therapy services, has contacted the MD and asked him to consider requesting that Lynette be seen by outpatient PT and OT. When he mentioned this to Lynette, Lynette began to cry and said, “What good will that do? I can’t get there anyway. At least now I have people coming to my house, and that’s better than nothing. Besides, even if I could get there, I can’t come three times a week. I just want everything to go back to how it was before I had this stupid stroke!” To see a video vignette depicting Lynette’s Home Health experience, click here.

References

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