Crash Testing:

The impact of a dedicated nurse educator on parachuting hemodialysis patients

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Background

- Usual Method for patient education
  - Patient referred to a Nephrologist→ Nephrologist refer patient to the Kidney Clinic→ patient/family education with the purpose of preventing renal replacement therapy for a long as possible
- The problem: Parachutes
- Renal Triage Nurse (RTN) Proposal

Renal Triage Nurse (RTN) Position Purpose

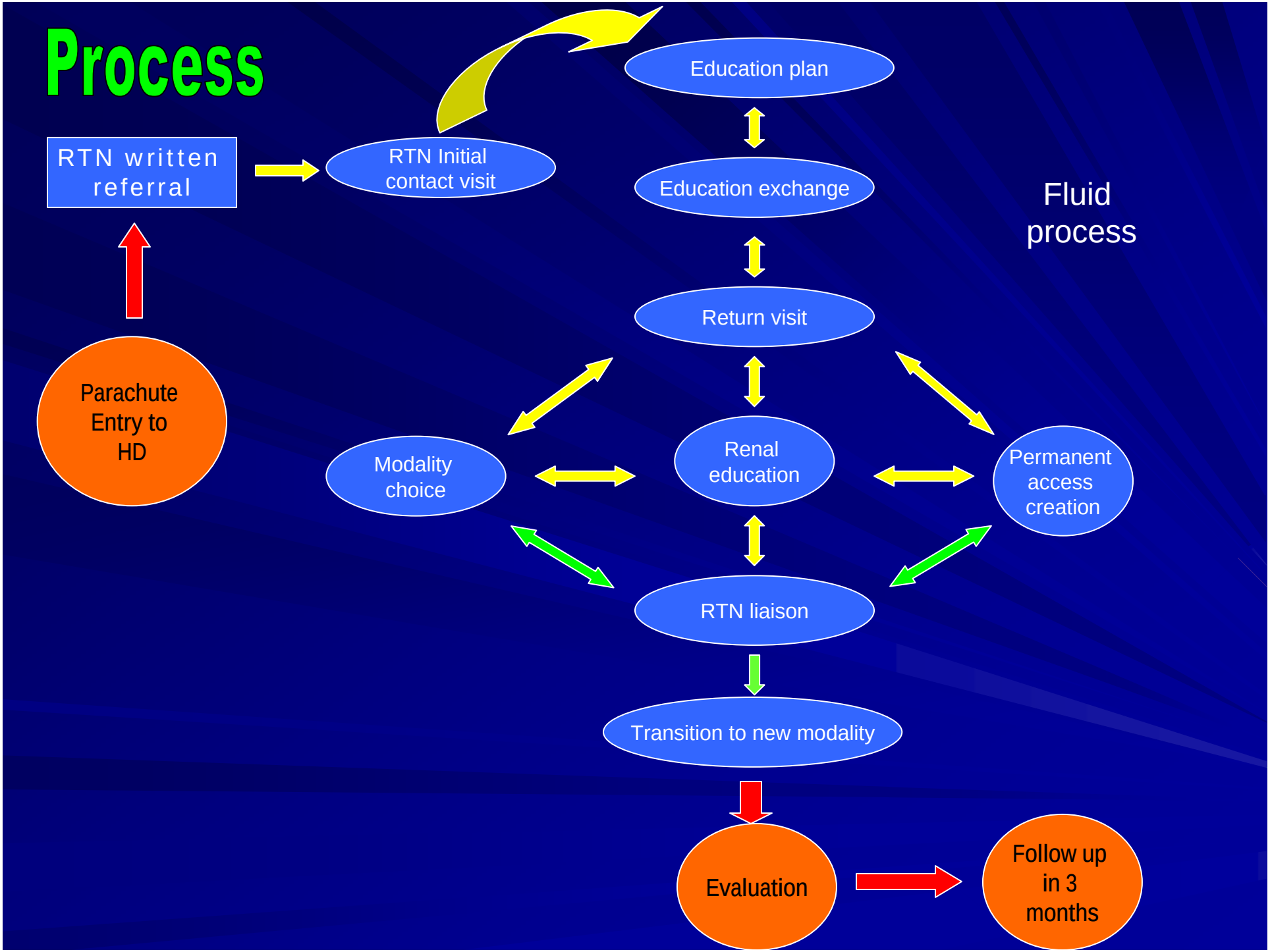
- Provide comprehensive renal education
  - Face to face
  - Telephone
- Facilitate transition to a modality choice
  - Facilitate the expedient creation of required access for Renal Replacement Therapy (RRT)
  - Assist in identifying potential live kidney transplant donors
  - Referral to other members of the health care team
- Support patient and family
- Liaise between all members of health care team

RTN Population

- Definition of “parachuter”:

  Hemodialysis (HD) patients who have:
  - been followed less than 6 months in the Kidney Clinic
  - very late or never referred to the Nephrologist

  (Includes hospitalized patients with newly diagnosed chronic ESRD)
- Referred patients between December 1st, 2006 and July 31, 2007 and being followed by RTN is 23
  - Total HD starts: 56
  - Referred to RTN: 24


Process
RTN written referral
RTN Initial contact visit
Education plan
Education exchange
Return visit
Fluid process
Parachute Entry to HD
Modality choice
Renal education
Permanent access creation
RTN liaison
Transition to new modality
Evaluation
Follow up in 3 months

Demographics

Variables	N=23
Age- yr (range)	63 (23-80)
Gender- no.(%) - Male	 17 (74 %)
Race- no.(%) - Caucasian - Asian - First Nations	 15 (65 %) 6 (26 %) 2 (9 %)
Education- no.(%) - College/University - High - Elementary - Other/Unknown	 13 (57 %) 4 (17 %) 3 (13 %) 3 (13 %)

Demographics Continued

Variable	N=23
Work Status- no. (%)	
Retired	10 (44 %)
Employed	7 (30 %)
Unemployed	2 (9 %)
Disability	2 (9 %)
Other	2 (9 %)
Comorbidities- no. (%) (DM, HTN, CAD, CVD, PVD, CHF)	
1	9 (39 %)
2	5 (22 %)
3	0 (0 %)
4	2 (9 %)
5	1 (4 %)
Causes of ESRD- no. (%)	
Other	9 (39 %)
Glomerulonephritis	7 (30 %)
Diabetes	5 (22 %)
Hypertension	2 (9 %)

RTN Variables

- Time from referral to initial contact visit:
  - median: 6 days (range 0-28 days)
- Duration of visits
  - Initial contact: median 3 hrs (range 25 min-3 hrs)
  - 1st follow up visit: median 50 min (range 10-2.5 hrs)
- Cumulative total of visit time per patient
  - median 6.8 hrs (range1-13 hrs)

RTN Variables

- Number of RTN visits per patient
  - median: 6 (range 1-17 visits)
- Number of visits to modality decision
  - median: 2 (range 1-10)
- Length in program to education completion
  - 13 patients completed to date
  - median: 55 days (range 0-162 days)
- Ongoing education
  - 8 patients in progress

Where Patients Ended Up

- Current modality
  - HD in centre : 11 (48 %)
  - HD community: 3 (13%)
  - Home HD: 1 (4%)
  - Peritoneal Dialysis: 3 (13%)
  - Transplant: 2 (plus 2 soon to be transplanted) (9%)
  - Left the program: 3 (13%) (death)
- Time to transfer out of in center HD
  - median: 41 days (range1-122 days)

Patients Who Remain on HD (N=11)

- Time to first vascular access clinic visit:
  - median: 12 days (range 0-120 days)
- Form of permanent access
  - 2 patients stayed on a permanent catheter
  - 7 patients had Arterial Venous Fistulas (AVF) created
    - Time until AVF creation: median 35 days (range 0-120 days)
  - 2 patients awaiting AVF creation

Additional Experiences

- Start up
- Buy in
- Communication
- Non patient contact time
- Rewards
- Barriers

Conclusion

- Anecdotally, dedicated staff appears to expedite the movement of patients towards a permanent RRT
- Qualitative preliminary analysis supports this role
- Limitations
  - Study Population
  - Time
  - Retrospective analysis yet to be completed
- Possible future direction
  - Look at the influence of uremia in the timing of education
  - Consider the effects of increased RTN hours to speed up transition to an alternate RRT and how increased RTN contact may translate into the cost of RRT
  - Publish findings

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