

Abstract

Methods

Results

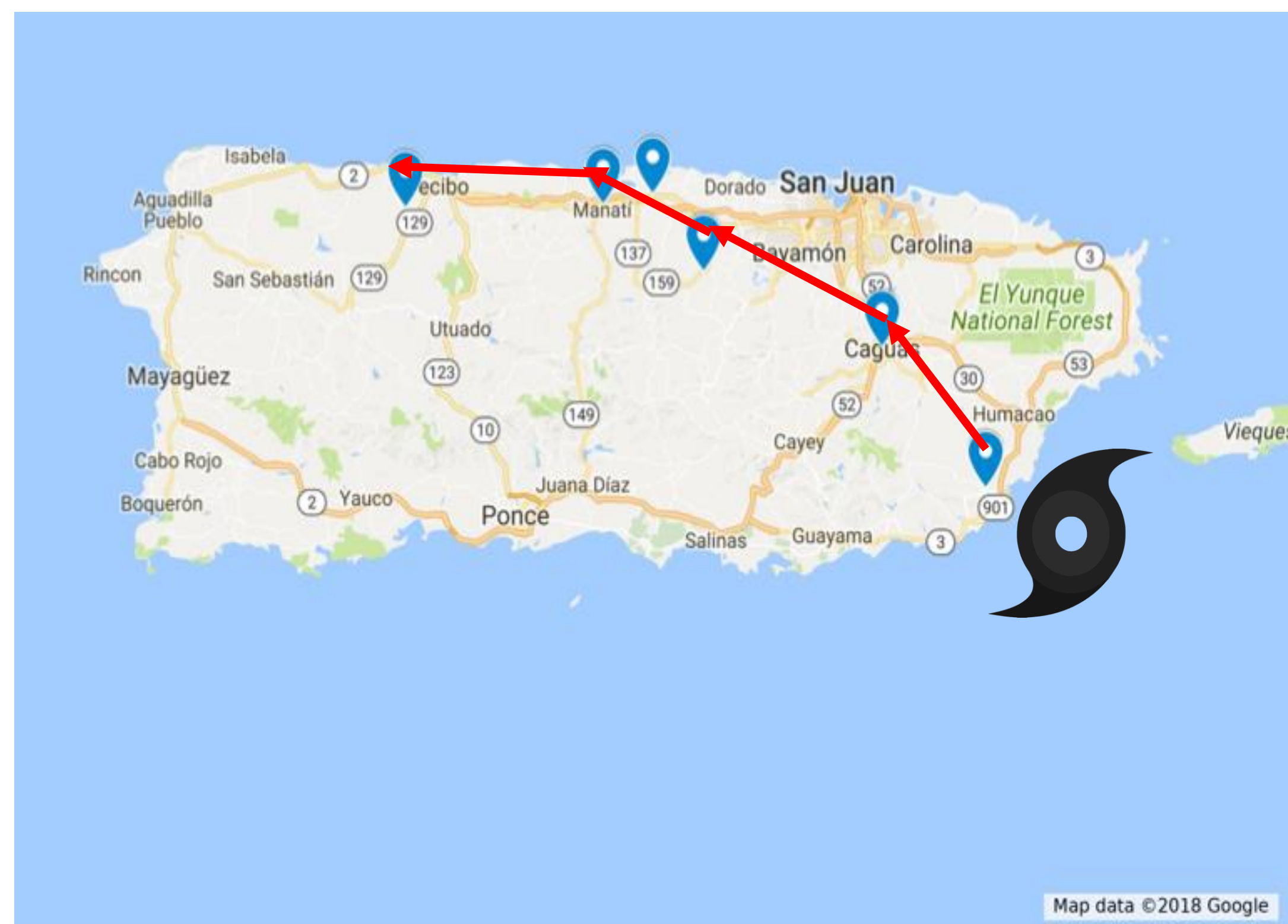


Figure 1. Hurricane Maria path through Puerto Rico.

The PRMS registry was used to establish the location of MS patients across PR. 2049 patients were identified. The island was divided into 7 zones for simplification. Zone 1 is the metropolitan area. Zones 2, 6, and 7 were the most affected by the hurricane (Figure 2).

Distribution of MS patients in PR 2017



Figure 2. Distribution of MS Patients in PR 2017 indicated by zones and color. Yellow stars represent the established distribution sites

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
44.15%	12.2%	9.8%	10.96%	9.26%	3.34%	9.55%

Funding Organization	Type of Funding
Unidos por Puerto Rico	\$ 43,000
Fundación Comunitaria de PR	\$ 5,373
Multiple Sclerosis Foundation	Battery Fans Cooling vest
Others	Non Perishable Food Boxes Cooling pads Water bottles

Figure 3. Types of funding provided to the PRMSF

The immediate help consisted of:

- Making medication available to patients. PRMSF Medical Director, Dr. Angel Chinae, and San Juan MS Center requested assistance and medication samples for oral DMTs from pharmaceutical companies. Sanofi, Novartis, and Biogen in Miami brought samples to the island via private courier and in person.
- Identifying resources, open sites, and pharmacies. A network of medical representatives and health associates available at the Metropolitan area volunteered to assist.
- To provide services to patients in need of monthly infusions and treatment for relapses. Special Care Pharmacy in the metropolitan area established an Infusion Center. This Center's diesel generator operated 24 hours a day to preserve the MS medication.

Additionally

- Funds were obtained to provide patients non-perishable food, water, and other basic necessities (Figure 3-4).
- The PRMSF Executive Director, Lourdes Fernandez, established distribution centers in various physician's offices of the island.
- The MS Foundation also received funds from "Unidos por Puerto Rico" and "Fundación Comunitaria de Puerto Rico" to help patients that had lost their homes and appliances (Figure 4).

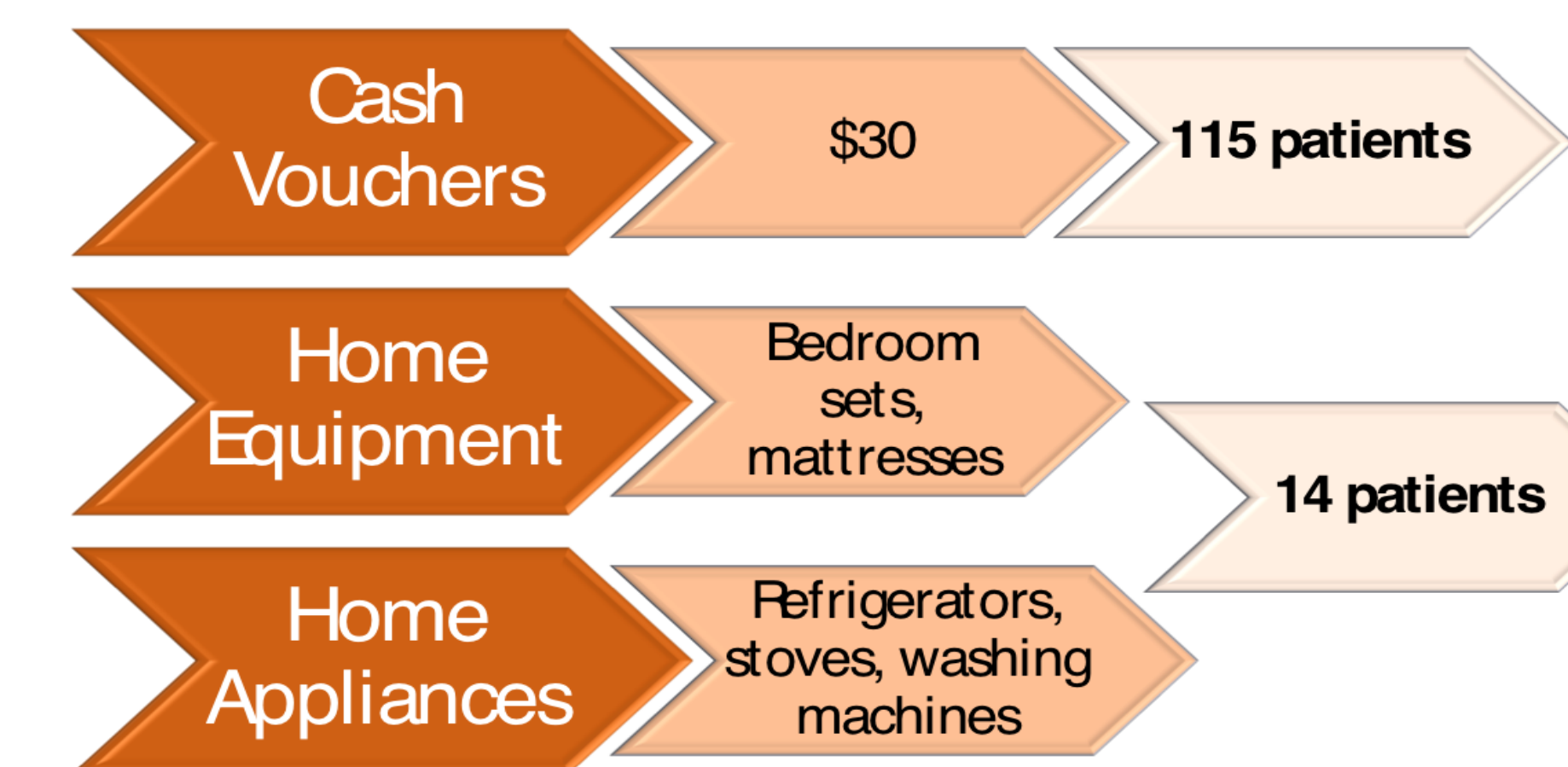


Figure 4. Shows some of the aid provided to patients.



Figure 5. Houses of patients severely affected by the hurricane.



Conclusion

- Hurricane Maria caused the worst devastation of the century in Puerto Rico.
- We were not prepared and it has been evidenced by the destruction of our electric system, infrastructure and hospitals, among others.
- The PRMSF registry enabled the effective distribution of aid to our patients.
- Future work will include the development of a standing operating procedure (SOP), which will include a detailed protocol to follow after a catastrophe.
- Alliances between the PRMSF, neurologists, pharmaceutical companies, and other healthcare providers will be organized to be able to reach the majority of our patients in case of an event like this one.
- We aim to motivate other countries to establish emergency management protocols to be more effective after events of this magnitude.
- 15% of the population migrate² to USA. We need to consider how MS patient migration will affect the acquisition of DMTs and proper follow up treatment in other states.

Objective

Establish how the PRMS registry helped provide relief efforts after Hurricane Maria

References

1. Chinae A et al Increasing Incidence and Prevalence of Multiple Sclerosis in Puerto Rico (2013-2016) *Neuroepidemiology* 2017 Nov 14;49(3-4):106-112. doi: 10.1159/000484090
2. Melendez, E., Hinojosa, J. 2017. Estimates of post-Hurricane Maria Exodus from Puerto Rico. Center for Puerto Rican Studies

Disclosure

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