

NASCIO 2006 Recognition Awards Entry
Mt.gov End-of-Life Registry
Executive Summary

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The Montana Department of Justice's End-of-Life Registry, launched March 14, 2006, stores advance directives and allows registered health care providers and customers access to them 24 hours a day, seven days a week. A Montana law, passed in 2005 by the Montana state legislature, was created to address the growing public concern involved with advanced health care decisions and mandated this innovative state service. This valuable service makes it possible for an individual's end of life wishes to be stored and retrieved when necessary.

The Montana Department of Justice End-of-Life Registry is a quick and easy to use service that stores and displays necessary advanced health care directives. Because of the time sensitivity associated with the directives, it is important that the information can be accessed quickly while protecting the privacy of the registrant.

To register an advance directive with the state the user must complete a valid advanced directive form and mail it in to the Department of Justice. The documents are stored in a secure database and the information is protected by a username and password or a unique registration number. The Registry makes this information available whenever necessary to ensure that registrant's advanced health care directives are followed.

There are several levels of security for the End-of-Life Registry, including a health care provider log in and a registrant search. When the registrant search is selected the user has the option to enter the name and access code of the registrant. If the user does not have that information they can search using the name, Social Security number, and date of birth of the registrant. The healthcare provider has the ability to log on with a username and password and can search by name and access code or by first name, last name, Social Security number, date of birth, or mother's maiden name.

The End-of-Life Registry is fast and easy to use saving the health care provider valuable time when trying to determine if a patient has an advanced directive. The service also gives the registrant peace of mind that the advanced directive that they filed is available to health care workers when it is needed, twenty-four hours a day.

Since its release on March 14, 2006 over 5914 advanced directives have been processed. The service provides an important value added benefit to both registrants and health care providers by giving them access to these important documents anytime.

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Mt.gov End-of-Life Registry

Description of business problem and solution, including length of time in operation-

The Montana End-of-Life Registry makes it easy for people to electronically store their advance directives and make them available to health care workers all over the country. A Montana law, created to address the growing public concern involved with advanced health care decisions, mandated this innovative state service. This provides an invaluable service to citizens, making their end-of-life directives available in an emergency or controversial situation.

The growing public concern involved with advanced health care decisions created a unique business problem. It was imperative that the necessary directive information was collected, stored securely, and available to the individual and their family or a health care provider at anytime.

To accomplish the necessary goals of the service the advance directive documents are stored in a secure database and the information is protected by a username and password or a unique registration number. The service is available twenty-four hours a day, as is the Department of Justice helpdesk in case a user has questions. The End-of-Life Registry makes this information available whenever necessary to ensure that registrant's advanced health care directives are followed.

To register an advance directive with the state the user must complete a valid advanced directive form and mail it in to the Department of Justice. After the document is saved the advanced directive and registration information is mailed back to the registrant. The registrant receives a wallet card and four stickers to adhere to items such as a driver license and health insurance cards that contain an access code to retrieve the document.

The End-of-Life Registry has two types of users, the registrant and his or her family members (referred to as citizen users) and registered health care providers. Once the advance directive is stored, citizen users can retrieve the document by either entering the name of the registrant and access code found on the wallet card or stickers or by searching for a registrant using Social Security number, date of birth and mother's maiden name.

Health care providers can register with the Department of Justice by completing and mailing in the healthcare provider registration agreement. They are issued a username and password to access the system and they have the ability to search by name and access code or by first name, last name, Social Security number, date of birth, or mother's maiden name.

The End-of-Life Registry provides a convenient, secure way for individuals to store their advance health care directives and make them available to health care providers whenever and wherever necessary. The End-of-Registry was launched March 14, 2006.

The End-of-Life Registry service runs on our production web server, with the following specifications:

Production Database Server - 161.7.140.62

IBM ASCII Monitor/Console (shared between the 4 AIX boxen)

IBM p640 database server (B80)

375MHz POWER3-II

1GB RAM

2 - 9GB SCSI drives - mirrored

2 - 36GB SCSI drives - mirrored

AIX 4.3.3 Operating System

Oracle 8.1.7

Backup performed daily via Upstream

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Production Web Server - 161.7.8.17

IBM ASCII Monitor/Console (shared between the 4 AIX boxen)

IBM p640 Web Server (B80)

375MHz POWER3-II

1GB RAM

2 - 18.2GB SCSI drives - mirrored

AIX 4.3.3 Operating System

IBM_HTTP_Server/1.3.12 Apache/1.3.12 (Unix)

Backup performed daily via Upstream

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Blade enclosure

Dell 1655MC PowerEdge blade enclosure

Headless

2 - Gigabit switches

2 - power supplies

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Blade 1 - app.mt.gov - 161.7.9.81

Dell 1655MC PowerEdge blade server

Headless

1.4GHZ Processor - Dual procs

2GB - RAM

2 - 146GB SCSI hard drives - mirrored

2 - gigabit NIC cards

SuSE Linux Standard Server 8

Kernel 2.4.21-281-smp
Backed up by Upstream

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Blade 2 - mtprodj1.mt.gov - 161.7.9.83
Dell 1655MC PowerEdge blade server
Headless
1.4GHZ Processor - Dual procs
2GB - RAM
2 - 146GB SCSI hard drives - mirrored
2 - gigabit NIC cards
SuSE Linux Standard Server 8
Kernel 2.4.21-281-smp
Backed up by Upstream

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Blade 3 - mtprodj2.mt.gov - 161.7.9.85
Dell 1655MC PowerEdge blade server
Headless
1.4GHZ Processor - Dual procs
2GB - RAM
2 - 146GB SCSI hard drives - mirrored
2 - gigabit NIC cards
SuSE Linux Standard Server 8
Kernel 2.4.21-281-smp
Backed up by Upstream

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Blades 4-6
Blade4 = 161.7.9.87
Blade5 - 161.7.9.82
Blade6 - 161.7.9.84
Dell 1655MC PowerEdge blade server
Headless
1.4GHZ Processor - Dual procs
2GB - RAM
2 - 146GB SCSI hard drives - mirrored
2 - gigabit NIC cards
SuSE Linux Standard Server 8
Kernel 2.4.21-281-smp
Backed up by Upstream

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APP3 - app3.mt.gov - 161.7.9.161
Dell 2550 PowerEdge server
Headless

931 MHz Processor - Dual procs
4GB - RAM
50+GB SCSI disk space - RAID5
Ethernet Pro 100 NIC
Kernel 2.4.21-281-smp
Backed up by Upstream

Significance to the improvement of the operation of Government-

The Montana Department of Justice End-of-Life Registry is a quick and easy to use service that stores and displays necessary advanced health care directives. This unique service provides important healthcare information to families or healthcare providers while maintaining a high level of security. Because of the time sensitivity associated with the directives, it is important that the information can be accessed quickly and from any location while protecting the privacy of the registrant. There are several levels of security, including a health care provider log in and a registrant search.

To register an advance directive with the state the user must complete a valid advanced directive form and mail it in to the Department of Justice. Any valid advanced directive form may be used as long as all of the requirements are met and there are forms available through the Registry if needed. Once the Department receives the form it is scanned and stored in the database as a PDF. Any personally identifying information is redacted before the image is scanned to protect the registrant. After the document is saved the advanced directive and registration information is mailed back to the registrant. They receive a wallet card and four stickers to adhere to items such as a driver license and health insurance cards that contain an access code to retrieve the document.

The End-of-Life Registry has two types of users, the registrant and his or her family members (referred to as citizen users) and registered health care providers. Once the advance directive is stored, citizen users can retrieve the document by either entering the name of the registrant and access code found on the wallet card or stickers or by searching for a registrant using Social Security number, date of birth and mother's maiden name.

Health care providers can register with the Department of Justice by completing and mailing in the healthcare provider registration agreement. They are then issued a username and password to access the system and they have the ability search by name and access code or by first name, last name, Social Security number, date of birth, or mother's maiden name.

The End-of-Life Registry provides a convenient, secure way for individuals to store their advance health care directives and make them available to health care providers whenever and wherever necessary.

Benefits Realized by service recipients, taxpayers, agency, or state-

The End-of-Life Registry is fast and easy to use saving the health care provider valuable time when trying to determine if a patient has an advanced directive. The service also gives the registrant peace of mind that the advanced directive that they filed is available to health care workers when it is needed, twenty-four hours a day.

The service provides an important value added benefit to both registrants and health care providers by giving them access to these important documents anytime. In May of 2007 a private company, Choices Bank, imported all their stored advanced directives into the state's database. This provides even more benefits for the healthcare providers because all of the advanced directives are in one place that is easily accessible.

Return on investment, short-term/long-term payback-

For the End-of-Life Registry service there was not a formal return on investment method used to measure the impact of the service. Since its release on March 14, 2006 over 5914 advanced directives have been processed. The service provides an important value added benefit to both registrants and health care providers by giving them access to these important documents anytime.

As with all of the services built by mt.gov there is a value added benefit to the customer. The End-of-Life Registry is fast and easy to use saving the health care provider valuable time when trying to determine if a patient has an advanced directive. The service also gives the registrant peace of mind that the advanced directive that they filed is available to health care workers when it is needed, twenty-four hours a day.

The End-of-Life Registry was created to meet a Montana State Law requiring the state to offer a web solution for an advanced directive registry and secure database. The coding and testing for this service took just six weeks and was launched on March 14th, 2006. The Department of Justice expects an increasing amount of advance directives to be processed due to the public concern surrounding this issue.

This service was developed and maintained without the use of tax dollars or a state general fund appropriation. This is possible through a public/private alliance between the state of Montana and mt.gov. By not paying development costs for the service, the Department of Justice saved over \$9, 558.00 and will continue to save money on enhancements.